



Master List of Hazardous Chemicals

Updated on 7/25/23

Marking Paint / Aerosol

Window Cleaner / Isopropanol

Fire Extinguisher (Dry) / Pressurized Gas

Diesel Fuel #2

Diesel Exhaust Fluid

Motor Oil

Hydraulic Fluid

Hand Sanitizer

PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

SECTION 1. IDENTIFICATION

Product name : PURELL® Advanced Hand Sanitizer Sanitizing Gel

Manufacturer or supplier's details

Company name of supplier : GOJO Industries, Inc.
Address : One GOJO Plaza, Suite 500
Akron, Ohio 44311
Telephone : 1 (330) 255-6000

Emergency telephone : CHEMTREC 1-800-424-9300
number : CHEMTREC +1-703-527-3887: Outside USA & CANADA

Recommended use of the chemical and restrictions on use

Recommended use : Hand Sanitizer
Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3
Eye irritation : Category 2A

GHS label elements

Hazard pictograms :  

Signal word : Warning

Hazard statements : H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. -
No smoking.
P233 Keep container tightly closed.


PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
Hazardous components

Chemical name	CAS-No.	Concentration (%)
Ethyl Alcohol	64-17-5	>= 60 - < 70

SECTION 4. FIRST AID MEASURES

General advice	: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	: If inhaled, remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash with water and soap as a precaution. Get medical attention if irritation develops and persists.
In case of eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Seek medical advice.
If swallowed	: If swallowed, DO NOT induce vomiting. Rinse mouth with water. Obtain medical attention.
Most important symptoms and effects, both acute and delayed	: Causes serious eye irritation.
Protection of first-aiders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing

SECTION 5. FIREFIGHTING MEASURES


PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Flash back possible over considerable distance. May form explosive mixtures in air. Exposure to decomposition products may be a hazard to health. Carbon oxides
Hazardous combustion products	: Carbon oxides
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Material can create slippery conditions.
Environmental precautions	: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	: Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapours/mists with a water spray jet. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	: For personal protection see section 8. Keep away from heat. Use with local exhaust ventilation. Avoid contact with eyes.
-------------------------	---

PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Conditions for safe storage : Take measures to prevent the build up of electrostatic charge.
Keep in properly labelled containers.
Keep container tightly closed in a dry and well-ventilated place.
Store in accordance with the particular national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethyl Alcohol	64-17-5	TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		STEL	1,000 ppm	ACGIH

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : No special protective equipment required.

Eye protection : Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : No special protective equipment required.

Protective measures : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Avoid contact with eyes.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : gel

Colour : clear, colourless, yellow

Odour : citrus

Odour Threshold : No data available

pH : 6.5 - 8.5, (20 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling range : 70 °C

Flash point : 25 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.87 g/cm ³
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: Not applicable
Auto-ignition temperature	: not determined
Thermal decomposition	: The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic	: 3500 - 23000 mm ² /s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Oxidizing agents
Hazardous decomposition products	: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation
Eye contact
Skin contact

Acute toxicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): 124.7 mg/l

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Exposure time: 4 h
Test atmosphere: vapour

Skin corrosion/irritation

Not classified based on available information.

Components:**Ethyl Alcohol:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:**Ethyl Alcohol:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:**Ethyl Alcohol:**

Test Type: Local lymph node assay (LLNA)

Exposure routes: Skin contact

Species: Mouse

Result: negative

Germ cell mutagenicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test
Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)
Test species: Mouse
Application Route: Ingestion
Result: negative

Carcinogenicity

Not classified based on available information.

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:**Ethyl Alcohol:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 416
Result: negative

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****Ethyl Alcohol:**

Species: Rat
NOAEL: 2,400 mg/kg
Application Route: Ingestion
Exposure time: 2 y

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****Ethyl Alcohol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 9.6 mg/l
Exposure time: 9 d

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

Toxicity to bacteria : EC50 (Photobacterium phosphoreum): 32.1 mg/l
Exposure time: 0.25 h

Persistence and degradability**Components:****Ethyl Alcohol:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 84 %
Exposure time: 20 d

Bioaccumulative potential**Components:****Ethyl Alcohol:**

Partition coefficient: n- : log Pow: -0.35
octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****IATA-DGR**

UN/ID No. : UN 1170
Proper shipping name : Ethanol solution
Class : 3
Packing group : III
Packing instruction (cargo aircraft) : 366
Packing instruction : 355
(passenger aircraft)

**PURELL® Advanced Hand Sanitizer Sanitizing Gel**

Version 1.0

SDS Number: 400000005869

Revision Date: 04/21/2020

IMDG-Code

UN number : UN 1170
Proper shipping name : ETHANOL SOLUTION
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-D
Marine pollutant : no

National Regulations**49 CFR**

UN/ID/NA number : UN 1170
Proper shipping name : Ethanol solutions
Class : 3
Packing group : III
ERG Code : 127
Marine pollutant : no

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act**

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Ethyl Alcohol	64-17-5	65.2815 %
---------------	---------	-----------

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

Clean Water Act

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65 This product does not require a warning label under California Proposition 65.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

PURELL® Advanced Hand Sanitizer Sanitizing Gel

Version 1.0

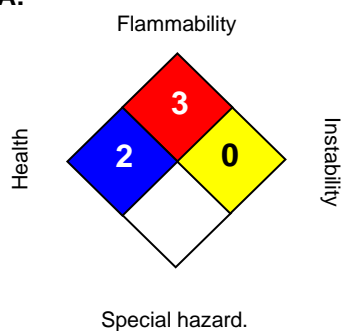
SDS Number: 400000005869

Revision Date: 04/21/2020

AICS	: On the inventory, or in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 04/21/2020

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Safety Data Sheet

According to OSHA HCS 2012 (29 CFR 1910.1200), Health Canada HPR (SOR/2015-17), and Mexico NOM-018-STPS-2015



SECTION 1: Identification

Product Identifier: **No. 2 Diesel Fuel**

Other means of identification: #2DSL ULS (All Grades); #2DSL HS (All Grades); #2DSL LS (All Grades); CARB DSL (All Grades); DIST CARB-Diesel (All Grades); Distillate, Diesel (All Grades); Gas Oil (All Grades); Hydrodewaxer Diesel (All Grades); Diesel Fuel (All Grades); EPA Diesel Fuel (All Grades); No. 2 Diesel (All Grades); No. 2 Diesel Fuel Oil (All Grades); No. 2 Distillate; No. 2 Diesel with Renewable Diesel (All Grades); Super Diesel Fuel (All Grades); Distillate Blend Stock; Fuels, Diesel; Virgin Diesel Fuel; PCR - HOD - Heating Oil Distillate; Diesel, Dyed and Undyed; F-76 Diesel

Code: **001847**

Issue date: 01-Mar-2023

MARPOL Annex I Category : Gas Oils, Including Ship's Bunkers

Relevant identified uses: Fuel

Uses advised against: All others

24 Hour Emergency Phone Number: CHEMTREC Global +1 703 527 3887
CHEMTREC United States 1-800-424-9300
CHEMTREC Mexico 01-800-681-9531

Manufacturer/Supplier: Phillips 66 Company
P.O. Box 421959
Houston, Texas 77242-1959

SDS Information: URL: www.phillips66.com/SDS
Phone: 800-762-0942
Email: SDS@P66.com

SECTION 2: Hazard identification

Classified Hazards

H226 -- Flammable liquids -- Category 3
H304 -- Aspiration Hazard -- Category 1
H315 -- Skin corrosion/irritation -- Category 2
H332 -- Acute toxicity, Inhalation -- Category 4
H351 -- Carcinogenicity -- Category 2
H373 -- Specific target organ toxicity (repeated exposure) -- Category 2 (Liver, thymus, and bone marrow)
H411 -- Hazardous to the aquatic environment, chronic toxicity -- Category 2

Hazards Not Otherwise Classified (HNOC)

PHNOC: Electrostatic charge may be generated during pumping and other operations

None known HHNOC: None known

Label elements



DANGER

H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H332 - Harmful if inhaled
H351 - Suspected of causing cancer
H373 - May cause damage to the following organs through prolonged or repeated exposure: Liver, thymus, and bone marrow
H411 - Toxic to aquatic life with long lasting effects



P201 - Obtain special instructions before use; P202 - Do not handle until all safety precautions have been read and understood; P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking; P233 - Keep container tightly closed; P240 - Ground/bond container and receiving equipment; P241 - Use explosion-proof electrical (ventilation and lighting) equipment; P242 - Use only non-sparking tools; P243 - Take precautionary measures against static discharge; P260 - Do not breathe dust/fume/gas/mist/vapors/spray; P264 - Wash skin thoroughly after handling; P271 - Use only outdoors or in a well-ventilated area; P273 - Avoid release to the environment; P280 - Wear protective gloves/protective clothing and eye/face protection; P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; P331 - Do NOT induce vomiting; P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower; P332 + P313 - If skin irritation occurs: Get medical advice/attention; P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing; P308 + P313 - IF exposed or concerned: Get medical advice/attention; P363 - Wash contaminated clothing before reuse; P370 + P378 - In case of fire: Use CO2, dry chemical, or foam to extinguish; P391 - Collect spillage; P403 + P235 - Store in a well-ventilated place. Keep cool; P501 - Dispose of contents/ container to an approved waste

disposal plant

SECTION 3: Composition/information on ingredients

Substance	CASRN	Concentration ¹
Fuels, diesel, no. 2	68476-34-6	100

Hazardous Constituent(s) Contained Within Above Complex Substance(s)

Substance	CASRN	Concentration ¹
Naphthalene	91-20-3	<1

¹ All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

Eye Contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician. (see Note to Physician)

Inhalation: If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most important symptoms and effects, both acute and delayed: While significant vapor concentrations are not likely, high concentrations can cause minor respiratory irritation, headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Ingestion can cause irritation of the digestive tract, nausea, diarrhea, and vomiting. Prolonged or repeated contact may dry skin and cause irritation.

Notes to Physician: When using high-pressure equipment, injection of product under the skin can occur. In this case, the casualty should be sent immediately to the hospital. Do not wait for symptoms to develop. High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. These injuries often require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury. Early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

SECTION 5: Firefighting measures

NFPA 704: National Fire Protection Association

Health: 1 Flammability: 2 Instability: 0



0 = minimal hazard
1 = slight hazard
2 = moderate hazard
3 = severe hazard
4 = extreme hazard

Extinguishing Media: Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined

spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters.

Specific hazards arising from the chemical

Unusual Fire & Explosion Hazards: Flammable. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe) Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. This product will float and can be reignited on surface water. Vapors are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

Special protective actions for fire-fighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Flammable. Spillages of liquid product will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use foam on spills to minimize vapors Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802).

Methods and material for containment and cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

SECTION 7: Handling and storage

Precautions for safe handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use non-sparking tools. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Flammable. May vaporize easily at ambient temperatures. The vapor is heavier than air and may create an explosive mixture of vapor and air. Beware of accumulation in confined spaces and low lying areas. Open container slowly to relieve any pressure. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003

for specific bonding/grounding requirements. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames.

High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

For use as a motor fuel only. Do not use as a solvent due to its flammable and potentially toxic properties. Siphoning by mouth can result in lung aspiration which can be harmful or fatal.

The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of incomplete combustion products (e.g. carbon monoxide, oxides of sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels.

Diesel engine exhaust contains hazardous combustion products and has been identified as a cancer hazard. Exposure should be minimized to reduce potential risk.

Static Accumulation Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding of tanks, transfer piping, and storage tank level floats are necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. Special care should be given to ensure that special slow load procedures for "switch loading" are followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such as gasoline or naphtha). For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Conditions for safe storage: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

Substance	ACGIH	OSHA	Mexico	Phillips 66
Fuels, diesel, no. 2	TWA-8hr: 100 mg/m ³ inhalable fraction and vapor Diesel fuel Skin	---	TWA-8hr: 100 mg/m ³ inhalable fraction and vapor (VLE-PPT)	---
Naphthalene	TWA-8hr: 10 ppm Skin	TWA-8hr: 10 ppm TWA-8hr: 50 mg/m ³ Carcinogen	TWA-8hr: 10 ppm (VLE-PPT) STEL: 15 ppm (PPT-CT)	TWA-8hr: 10 ppm Skin

State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Biological occupational exposure limits

Substance	ACGIH	Mexican NOM-047-SSA1-2011
Naphthalene	1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis in : (end of shift)	---

State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information. --- = None.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye protection that meets or exceeds ANSI Z.87.1 is recommended to protect against potential eye contact, irritation, or injury. Depending on conditions of use, a face shield may be necessary.

Skin/Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls, or encapsulated suits. Suggested protective materials: Nitrile rubber.

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with organic vapor cartridges/canisters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Other Protective Equipment: Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9: Physical and chemical properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Color:	Straw colored to dyed red
Physical State:	Liquid
Odor:	Diesel fuel
Odor threshold:	No data
pH:	Not applicable
Melting / freezing point:	No data
Initial boiling point and boiling range:	300 - 690 °F / 149 - 366 °C
Flash point:	125 - 180 °F / 52 - 82 °C
Method:	Pensky-Martens Closed Cup (PMCC), ASTM D93, EPA 1010
Evaporation Rate (nBuAc=1):	<1
Flammability (solid, gas):	Not applicable
Upper Explosive Limits (vol % in air):	10.0
Lower Explosive Limits (vol % in air):	0.3
Vapor pressure:	0.40 mm Hg
Vapor density:	> 3 (air = 1)
Relative density:	0.81-0.88 @ 60°F (15.6°C) (water = 1)
Solubility:	Negligible
Partition coefficient n-octanol /water (log Kow):	No data
Autoignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data
Molecular weight:	No data

Other information

Particle characteristics No data
Pour point: No data
Percent volatile: Negligible @ ambient conditions
Bulk density: 7.08 lbs/gal

SECTION 10: Stability and reactivity

Reactivity: Not chemically reactive.

Chemical stability: Stable under normal ambient and anticipated conditions of use.

Possibility of Hazardous Reactions: Hazardous reactions not anticipated.

Conditions to Avoid: Avoid high temperatures and all sources of ignition. Prevent vapor accumulation.

Incompatible Materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous Decomposition Products: Not anticipated under normal conditions of use.

SECTION 11: Toxicological information

Information on Toxicological Effects

Substance / Mixture

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	Harmful if inhaled		>4.1 mg/L (mist)
Dermal	Unlikely to be harmful		>2 g/kg
Oral	Unlikely to be harmful		> 5 g/kg

Likely Routes of Exposure: Inhalation, eye contact, skin contact

Aspiration Hazard: May be fatal if swallowed and enters airways.

Skin Corrosion/Irritation: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Causes mild eye irritation.

Skin Sensitization: Not expected to be a skin sensitizer.

Respiratory Sensitization: No information available on the mixture, however none of the components have been classified for respiratory sensitization (or are below the concentration threshold for classification).

Specific target organ toxicity - Single exposure: Not expected to cause organ effects from single exposure.

Specific target organ toxicity - Repeated exposure: May cause damage to organs through prolonged or repeated exposure. Repeated dermal application of petroleum gas oils for 90 days resulted in decreased liver, thymus, and spleen weights, and altered bone marrow function. Microscopic alterations included liver hypertrophy and necrosis, decreased hematopoiesis and lymphocyte depletion.

Carcinogenicity: Suspected of causing cancer. Petroleum middle distillates have been shown to cause skin tumors in mice following repeated and prolonged skin contact. Follow-up studies have shown that these tumors are produced through a non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation.

Germ Cell Mutagenicity: Not expected to cause heritable genetic effects.

Reproductive Toxicity: Not expected to cause reproductive toxicity.

Other Comments: Diesel engine exhaust has been classified by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a carcinogen.

Information on Toxicological Effects of Components

Naphthalene

Additional Information (Carcinogenicity): Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The US National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

SECTION 12: Ecological information



GHS Classification:
H411 -- Hazardous to the aquatic environment, chronic toxicity -- Category 2
Toxic to aquatic life with long lasting effects.

Toxicity: Experimental studies of gas oils show that acute aquatic toxicity values are typically in the range 2-20 mg/L. These values are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions. They should be regarded as toxic to aquatic organisms, with the potential to cause long term adverse effects in the aquatic environment.

Persistence and Degradability: Gas oils are complex combinations of individual hydrocarbon species. Based on the known or expected properties of individual constituents, category members are not predicted to be readily biodegradable. Some hydrocarbon constituents of gas oils are predicted to meet the criteria for persistence; on the other hand, some components can be easily degraded by microorganisms under aerobic conditions.

Persistence per IOPC Fund definition: Non-Persistent

Bioaccumulative Potential: Gas oil components have measured or calculated Log Kow values in the range of 3.9 to 6 which indicates a high potential to bioaccumulate. Lower molecular weight compounds are readily metabolized and the actual bioaccumulation potential of higher molecular weight compounds is limited by the low water solubility and large molecular size.

Mobility in Soil: Releases to water will result in a hydrocarbon film floating and spreading on the surface. For the lighter components, volatilization is an important loss process and reduces the hazard to aquatic organisms. In air, the hydrocarbon vapors react readily with hydroxyl radicals with half-lives of less than one day. Photooxidation on the water surface is also a significant loss process particularly for polycyclic aromatic compounds. In water, the majority of components will be adsorbed on sediment. Adsorption is the most predominant physical process on release to soil. Adsorbed hydrocarbons will slowly degrade in both water and soil.

Other adverse effects: None anticipated.

SECTION 13: Disposal considerations

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste. However, it would likely be identified as a federally regulated RCRA hazardous waste for the following characteristic(s) shown below. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. Container contents should be completely used and containers should be emptied prior to discard. Container residues and rinseates could be considered to be hazardous wastes.

EPA Waste Number(s)

- D001 - Ignitability characteristic

SECTION 14: Transport information

UN Number: UN1202

UN proper shipping name: Diesel fuel

Transport hazard class(es): 3 or Combustible liquid

Packing Group: III

Environmental Hazard(s): Marine pollutant - Environmentally Hazardous

Special precautions for user: Combustible liquid classification is dependent on a flash point of >60° C (140° F) and <93° C (200° F).

**NA1993 may be used instead of UN1202 for domestic land transportation.

If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL Annex I.

Container(s) greater than 5 liters (liquids) or 5 kilograms (solids), shipped by water mode and ALL bulk shipments may require the shipping description to contain the "Marine Pollutant" notation [49 CFR 172.203(l)] and the container(s) to display the [Marine Pollutant Mark] [49 CFR 172.322].

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory information

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds)

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CERCLA/SARA - Section 313 and 40 CFR 372

This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:


Substance	Concentration ¹	de minimis
Naphthalene	<1	0.1%

¹ All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

EPA (CERCLA) Reportable Quantity (in pounds)

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

California Proposition 65

 **WARNING:** This product can expose you to chemicals including Naphthalene (CASRN 91-20-3) and Benzene (CASRN 71-43-2) which are known to the State of California to cause cancer, and Toluene (CASRN 108-88-3) and Benzene (CASRN 71-43-2) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

International Inventories

TSCA (United States): All ingredients are on the inventory or exempt from listing.
All components are either on the DSL, or are exempt from DSL listing requirements.

SECTION 16: Other information

Issue date	Previous Issue Date:	SDS Number	Status:
01-Mar-2023	30-Apr-2020	001847	FINAL

Reason for Revision:

Format change
Label Elements
Toxicological Information

Mexican NOM-018-STPS-2015:

The information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

Precautionary Statements

- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical (ventilation and lighting) equipment
- P242 - Use only non-sparking tools
- P243 - Take precautionary measures against static discharge
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P264 - Wash skin thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P273 - Avoid release to the environment
- P280 - Wear protective gloves/protective clothing and eye/face protection
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P331 - Do NOT induce vomiting
- P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P332 + P313 - If skin irritation occurs: Get medical advice/attention
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P308 + P313 - IF exposed or concerned: Get medical advice/attention
- P363 - Wash contaminated clothing before reuse
- P370 + P378 - In case of fire: Use CO₂, dry chemical, or foam to extinguish
- P391 - Collect spillage
- P403 + P235 - Store in a well-ventilated place. Keep cool
- P501 - Dispose of contents/ container to an approved waste disposal plant

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; HPR = Hazardous Products Regulations; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer of Expressed and Implied Warranties:

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.



Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 13 July 2015 Revision date: 26 September 2019 Supersedes: 13 July 2015 Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Musket DEF

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Diesel Exhaust Fluid

1.3. Supplier

Manufacturer/Supplier:
Musket Corporation
2929 Allen Parkway, Suite 4100
Houston, Texas
77019, USA
Phone: 713-332-5727

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300; Outside the US/Canada +1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	67.5	Not classified
Urea	(CAS-No.) 57-13-6	32.5	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Discontinue use and obtain medical attention if irritation develops and persists.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after skin contact	: May cause mild skin irritation.
Symptoms/effects after eye contact	: Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after ingestion	: Ingestion of small amounts would not be expected to produce toxicity.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Specific hazards arising from the chemical

Fire hazard	: The product is not flammable. Hazardous combustion products. carbon oxides (CO and CO ₂). Nitrogen oxides (NO _x). Ammonia.
Explosion hazard	: Product is not explosive.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid breathing dust, mist or spray. Avoid prolonged contact with eyes, skin and clothing.
------------------	--

6.1.1. For non-emergency personnel

Protective equipment	: Personal protective equipment. For further information refer to section 13.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	: Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: When heated to decomposition, emits toxic fumes.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Comply with applicable regulations.
Storage conditions	: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, incompatible materials.

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible materials : Strong acids. Strong bases. Strong oxidizers. Strong alkalis.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Musket DEF	
No additional information available	
Water (7732-18-5)	
No additional information available	
Urea (57-13-6)	
USA - AIHA - Occupational Exposure Limits	
WEEL TWA (mg/m ³)	10 mg/m ³

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

In case of splash hazard: safety glasses.

Materials for protective clothing:

Not applicable

Hand protection:

Wear chemically resistant protective gloves.

Eye protection:

In case of splash hazard: chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn

Personal protective equipment symbol(s):



Other information:

When using do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Color	: Colorless
Odor	: Faint odor of ammonia
Odor threshold	: No data available
pH	: 9.8 - 10
Melting point	: No data available
Freezing point	: -12 °C 11°F

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point	: 104 °C 219°F
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.087 - 1.903 g/cm ³ @ 20°C (68°F)
Specific gravity / density	: 9.0909 lbs./USG - 4.13 kg / 3.785L @ 20°C (68°F)
Solubility	: Water: Soluble
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. Conditions to avoid

Extremely high or low temperatures. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers. Strong alkalis.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Nitrogen oxides (NO_x). Ammonia.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
Urea (57-13-6)	
LD50 oral rat	5000 - 15000 mg/kg
LC50 inhalation rat (mg/l)	Urea dust at 22 mg/m ³ caused mild irritation (species not specified)

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 9.8 - 10
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 9.8 - 10
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic	: No data available
Likely routes of exposure	: Ingestion. Inhalation. Skin and eye contact.
Potential Adverse human health effects and symptoms	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after skin contact	: May cause mild skin irritation.
Symptoms/effects after eye contact	: Prolonged exposure to liquid may cause a mild irritation.
Symptoms/effects after ingestion	: Ingestion of small amounts would not be expected to produce toxicity.

SECTION 12: Ecological information

12.1. Toxicity

Urea (57-13-6)	
LC50 fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Urea (57-13-6)	
BCF fish 1	< 10
Log Pow	-1.59 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Comply with local regulations for disposal.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Urea (57-13-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Urea (57-13-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Water (7732-18-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Urea (57-13-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Water (7732-18-5)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

Urea (57-13-6)

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

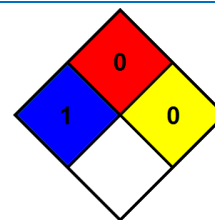
Revision date : 26 September 2019
Other information : None.

Musket DEF

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



- Hazard Rating
- Health : 1 Slight Hazard - Irritation or minor reversible injury possible
- Flammability : 0 Minimal Hazard - Materials that will not burn
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ABC Dry Chemical Fire Extinguishant-
(Pressurized and Non-pressurized)

Other Identifiers: Multi-purpose Dry Chemical

Product Code(s): CH550, F15, F18

Model Code(s) for Extinguishers: 411, 417, 419, 423, 424, 425, 441, 443, 450, 456, 461, 464, 467, 470, 473, 476, 481, 487, 488, 491, 495, 500, 564, 567, 573, 581, 589, 592, 594, 668, 692, 713, 714, 715, 720, 756, 760, 763, 781, 790, 791, 792.

Recommended Use: Fire suppression, not for human or animal drug use.

Manufacturer: AMEREX CORPORATION

Internet Address: www.amerex-fire.com

Address: 7595 Gadsden Highway, P.O. Box 81
Trussville, AL 35173-0081

Company Telephone: (205) 655-3271

E-mail Address: info@amerex-fire.com

Emergency Contacts: Chemtrec 1(800) 424-9300 or
(703) 527-3887

Revised: July 8, 2020; Revision B

Section 2. HAZARDS IDENTIFICATION

GHS – Classification

Health	Environmental	Physical
Acute Toxicity: Category 5	None	None
Skin Corrosion/Irritation: Category 3	None	None
Skin Sensitization: NO	None	None
Eye: Category 2A	None	Warning
STOT –Category 3	None	Warning
Carcinogen: Category None	None	None

GHS – Label Symbol(s):

If Pressurized: Gas Under Pressure

GHS – Signal Word(s): Warning

Other Hazards Not Resulting in Classification: Mica may contain small quantities of quartz (crystalline silica). Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC found limited evidence for pulmonary carcinogenicity of crystalline silica in humans. In the case of normal use of this product, exposure to silica should be nil.

The attapulgite clay used in this product has a fiber length of less than 5µm; therefore, the clay is not considered to be carcinogenic to animals or humans.

GHS – Hazard Phrases

GHS Hazard	GHS Codes(s)	Code Phrase(s)
Physical	H229	*- Contents under pressure; may explode if heated.
Health	303	May be harmful if swallowed.
	315	Causes skin irritation.
	319	Causes serious eye irritation.
	335	May cause respiratory irritation.
Environmental	411	Toxic to aquatic life with long-lasting effects.
Precautionary:		
General	P101	If medical advice is needed, have product container or label at hand.
Prevention	P251	Do not pierce or burn, even after use. [As modified by IV ATP]
	261	Avoid breathing dust/fumes/gas/mist/vapours/spray. [As modified by IV ATP]
	264	Wash ... thoroughly after handling.
	270	Do not eat, drink or smoke when using this product.
	273	Avoid release to the environment.
	280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	P312	Call a POISON CENTER/doctor/.../if you feel unwell [As modified by IV ATP]
	321	Specific treatment (see... on this label)
	362	Take off contaminated clothing. [As modified by IV ATP]
	391	Collect spillage.
	301+312	IF SWALLOWED: Call a POISON CENTER/doctor/.../if you feel unwell
	302+352	IF ON SKIN: Wash with plenty of water/...[As modified by IV ATP]
	304+340	IF INHALED, remove person to fresh air and keep comfortable for breathing.
	305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
	332+313	If skin irritation occurs: Get medical advice/attention.
342+313	If experiencing respiratory symptoms, call a doctor.	
337+313	If eye irritation persists, get medical advice/attention.	
Storage	P410+403	*- Protect from sunlight. Store in well-ventilated place.
Disposal	P501	Dispose of contents/container to ... [... in accordance with local/regional/national/international regulation (to be specified)].

*- If under pressure

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No.	Weight %
Mono-ammonium phosphate	231-764-5	01-2119488166-29	7722-76-1	55-77
Ammonium sulfate	231-984-1	01-2119455044-46	7783-20-2	15-45
Attapulgite clay	601-805-5	Not Available	12174-11-7	3-8
Mica-potassium aluminum silicate	310-1276	Not Available	12001-26-2	<1
Silicone oil methyl hydrogen polysiloxane	613-152-3	Not Available	63148-57-2	<1
Calcium carbonate	207-439-9	Not Available	1317-65-3	<1
Amorphous silica precipitated synthetic zeoliteghs	231-545-4	01-2119379499-16-0036	7631-86-9	<1
Yellow 14 pigment – diazo dye	226-789-3	Not Available	5468-75-7	<1

Adverse health effects and symptoms:

Irritant to the respiratory system; Irritating to eyes and skin. Symptoms may include coughing, shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion, although unlikely, may cause cramps, nausea and diarrhea.

Section 4. FIRST AID MEASURES

Eye Exposure:

May cause irritation. Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation develops, or if vision changes occur.

Skin Exposure:

May cause skin irritation. In case of contact, wash with plenty of soap and water. Seek medical attention if irritation persists.

Inhalation:

May cause irritation, along with coughing. If respiratory irritation or distress occurs, remove victim to fresh air. Give oxygen and artificial respiration if needed. Seek medical attention if irritation persists.

Ingestion:

Overdose symptoms may include numbness or tingling in hands or feet, uneven heart rate, paralysis, feeling faint, chest pain or heavy feeling, pain spreading to the arm or shoulder, nausea, diarrhea, sweating, general ill feeling, or seizure (convulsions). If victim is conscious and alert, give 2-3 glasses of water to drink. If conscious, do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.

Medical conditions possibly aggravated by exposure:

Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease. Chronic overexposure may cause pneumoconiosis ("dusty lung" disease).

Section 5. FIRE-FIGHTING MEASURES

Flammable Properties:

Not flammable

Flash Point:

Not determined

Suitable Extinguishing Media:

Non-combustible. Use extinguishing media suitable for surrounding conditions.

Hazardous Combustion Products:

Carbon and sulfur oxides

Explosion Data:

Sensitivity to Mechanical Impact:

Not sensitive

Sensitivity to Static Discharge:

Not sensitive

Unusual fire/explosion hazards:

In a fire this material may decompose, releasing toxic and irritating oxides of carbon, sulfur, potassium, ammonia and nitrogen (see Section 10).

Protective Equipment and

Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus in pressure-demand, NIOSH approved or equivalent and full protective gear.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid inhalation, and contact with skin, eyes, and clothing.

Personal Protective Equipment:

Minimum - safety glasses, gloves, and a dust respirator.

Emergency Procedures:

NA

Methods for Containment:

Prevent further leakage or spillage if safe to do so.

Methods for Clean Up:

Avoid dust formation. Clean up released material using vacuum or wet sweep and shovel to minimize generation of dust. Bag and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

Environmental Precautions:

Prevent material from entering waterways.

Other:

If product is contaminated, use PPE and containment appropriate to the nature of the most toxic chemical/material in the mixture.

Section 7. HANDLING AND STORAGE

Personal Precautions:

Use appropriate PPE when handling or maintaining equipment and wash thoroughly after handling (see Section 8).

Conditions for Safe Storage/Handling:

Keep product in original container or extinguisher. Contents may be under pressure – inspect extinguisher consistent with product labeling to ensure container integrity.

Incompatible Products:

Do not mix with other extinguishing agents, particularly potassium bicarbonate and sodium bicarbonate. Incompatible with strong oxidizing agents and strong acids. Do not store in high humidity. Do not combine with chlorine compounds.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK *	EU BLV
Mono-ammonium phosphate	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC** Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC** Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Ammonium Sulfate	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC** Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC** Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Mica	PNOC** Total dust, 15 mg/m ³ 50 ug/m ³ Silica	PNOC** Total dust, 15 mg/m ³ 25 ug/m ³ Silica	PNOC** Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Attapulgite Clay	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC** Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	
Silicone oil	NR**	NR**	NR**	NA
Calcium carbonate	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC** Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	-----	NA
Amorphous silica	80 mg/m ³ % silica	10 mg/m ³	4 mg/m ³	NA
Yellow 14 pigment	NR	NR	NR	NA

*German regulatory limits **PNOC = Particulates not otherwise classified (ACGIH) also known as Particulates not otherwise regulated (OSHA) *** NR = Not Regulated. All values are 8 hour time weighted average concentrations.

Engineering Controls:

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment – PPE Code E:

The need for respiratory protection is not probable during short-term exposure. PPE use during production process must be independently evaluated.



Eye/Face Protection:
Skin and Body Protection:
Respiratory Protection:

Tightly fitting safety goggles
Wear protective gloves/coveralls
If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Use P100 respirators for limited exposure, use air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters for prolonged exposure. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current safety and health requirements. The need for respiratory protection is not likely for short-term use in well ventilated areas. Good personal hygiene practice is essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

Hygiene Measures:

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellow powder, finely divided odorless solid
Molecular Weight: NH₄H₂PO₄: 115.03; (NH₄)₂SO₄: 132.14
Odor: Odorless
Odor Threshold: No information available
Decomposition Temperature °C: 100 - 120

Freezing Point °C:	No information available
Initial Boiling Point °C:	No information available
Physical State:	Crystalline Powder
pH:	Mixture approximately 4 to 5; NH ₄ H ₂ PO ₄ : 4.2 in 0.2 molar solution; (NH ₄) ₂ SO ₄ : 5.5 in 0.1 molar solution
Flash Point °C:	None
Auto-ignition Temperature °C:	None
Boiling Point/Range °C:	No information available
Melting Point/Range °C:	NH ₄ H ₂ PO ₄ : 190; (NH ₄) ₂ SO ₄ : 280
Flammability:	Not Flammable
Flammability/Explosive Limits in Air °C:	Upper – No; Lower-No
Explosive Properties:	None
Oxidizing Properties:	None
Volatile Component (%vol)	Not Applicable
Evaporation Rate:	No information available
Vapor Density:	No information available
Vapor Pressure at 25 °C:	NH ₄ H ₂ PO ₄ : 1.41 mm/Hg; (NH ₄) ₂ SO ₄ : 2.573 kPa
Specific gravity at 25 °C:	NH ₄ H ₂ PO ₄ : 1.80; (NH ₄) ₂ SO ₄ : 1.77
Solubility:	Coated-Not Immediately Soluble in Water
Partition Coefficient:	NH ₄ H ₂ PO ₄ Est: -4.11; (NH ₄) ₂ SO ₄ : Est: -0.48
Viscosity:	No information available

NOTE: NH₄H₂PO₄ – Monoammonium Phosphate; (NH₄)₂SO₄: – Ammonium Sulfate

Section 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage and handling conditions.
Reactivity:	No reactivity for these chemicals is expected.
Incompatibles:	Strong alkalis (bases), magnesium, strong oxidizers, isocyanuric acids and chlorine compounds.
Conditions to Avoid:	Storage or handling near incompatibles.
Hazardous Decomposition Products:	Heat of fire may release carbon monoxide, carbon dioxide, and sulfur dioxide. Also, ammonia, oxides of phosphorous and nitrogen oxides may be released during decomposition.
Possibility of Hazardous Reactions:	Slight
Hazardous Polymerization	Does not occur

Section 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Inhalation, skin, and eye contact.
Symptoms:	
Immediate:	
Inhalation:	Irritation, coughing.
Eyes:	Irritation.
Skin:	Irritation.
Delayed:	Symptoms appear to be relatively immediate
Acute Toxicity:	Relatively non-toxic.
Chronic Toxicity:	
Short-term Exposure:	None known.
Long-term Exposure:	As with all dusts, pneumoconiosis, or "dusty lung" disease, may result from chronic exposure.

Acute Toxicity Values - Health

Chemical Name	LD50		LC50 (Inhalation)
	Oral	Dermal	
Mono-ammonium phosphate	5750 mg/kg (rat)	>7940 mg/kg (rabbit)	Not available
Ammonium Sulfate	2840 mg/kg (rat)	>2000 mg/kg (rat)	>1000 mg/m ³ (rat)
Mica	None	None	None
Attapulgate clay	None	None	None
Silicone oil	None	None	None
Calcium carbonate	6450 mg/kg (rat)	500 mg/24 hr (rabbit)	Not available
Amorphous silica	>5000 mg/kg (rat)	>2000 mg/kg (rabbit)	>2.2 mg/L (rat)
Yellow 14 pigment	>17000 mg/kg (rat)	>3000 mg/kg (rat)	>4448 mg/m ³ (rat)

Reproductive Toxicity:	This product's ingredients are not known to have reproductive or teratogenic effects.
Target Organs and Effects (TOST):	Respiratory system irritant). This product is a mild irritant to epithelial tissue, (eyes, mucous membranes, skin) and may aggravate dermatitis. No information was found indicating the product causes sensitization.

Other Toxicity Categories

Chemical Name	Germ Cell Mutagenicity	Carcinogenicity	Reproductive	TOST Single Exp	TOST Repeated Exp	Aspiration
Mono-ammonium phosphate	None	None	None	Cat 3	None	None
Ammonium Sulfate	None	None	None	Cat 3	None	None
Attapulgate clay	None	None	None	None	Kidney	None
Mica	None	None	None	None	None	None
Silicone oil	None	None	None	None	None	None
Calcium carbonate	None	None	None	None	None	None
Amorphous silica	None	None	None	None	None	None
Yellow 14 pigment	None	None	None	None	None	None

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Harmful effects to aquatic organisms after long-term exposure. Provides nutrient nitrogen and phosphorus to plant life.
Persistence/Degradability:	Degrades rapidly in humid/wet environment.
Probability of rapid biodegradation:	NH ₄ H ₂ PO ₄ Est: 0.693 (Rapid); (NH ₄) ₂ SO ₄ : Est: 0.684 (Rapid)
Anaerobic biodegradation probability:	NH ₄ H ₂ PO ₄ Est: 0.398 (Slow); (NH ₄) ₂ SO ₄ : Est: 0.398 (Slow)
Bioaccumulation potential:	Low.
Bioconcentration factor:	NH ₄ H ₂ PO ₄ : 3.16 L/kg; (NH ₄) ₂ SO ₄ : 3.16 L/kg (wet weight) (Low BCF)
Bioaccumulation factor:	NH ₄ H ₂ PO ₄ : 63.04 L/kg; (NH ₄) ₂ SO ₄ : 1.03 L/kg (wet weight)
Mobility in soil:	Slow evaporation rate; water soluble, may leach to groundwater
Log Koc:	NH ₄ H ₂ PO ₄ Est: -1.25; (NH ₄) ₂ SO ₄ Est: 1.35
Log Koa:	NH ₄ H ₂ PO ₄ Est: 16.72; (NH ₄) ₂ SO ₄ Est: 20.10
Log Kaw:	NH ₄ H ₂ PO ₄ Est: -20.86; (NH ₄) ₂ SO ₄ Est: -19.62

NOTE: NH₄H₂PO₄ – Mono-ammonium Phosphate; (NH₄)₂SO₄: – Ammonium Sulfate

Other Adverse Ecological Effects: No other known effects at this time

Aquatic Toxicity Values – Environment – Research

Chemical Name	Acute (LC50)	Chronic (LC50)
Mono-ammonium phosphate	N/A	N/A
Ammonium Sulfate	N/A	N/A
Mica	N/A	N/A
Attapulgate clay	N/A	N/A
Silicone oil	N/A	N/A
Calcium carbonate	N/A	N/A
Amorphous silica	N/A	N/A
Yellow 14 pigment	N/A	N/A

Aquatic Toxicity Values – Environment – Estimates

Chemical Name	Acute (LC50)	EC50
Mono-ammonium phosphate	2,91e+07 mg/l Fish 96 hr; 9.4e+06 mg/l Daphnid 48 hr;	6.70e+05 mg/l Gr. Algae 96 hr
Ammonium Sulfate	2521 mg/l Fish 96 hr; 1244 mg/l Daphnid 48 hr;	518 mg/l Gr. Algae 96 hr
Mica	N/A	N/A
Attapulgate clay	N/A	N/A
Silicone oil	N/A	N/A
Calcium carbonate	N/A	N/A
Amorphous silica	N/A	N/A
Yellow 14 pigment	N/A	N/A

Section 13. DISPOSAL CONSIDERATIONS

Safe Handling	Use appropriate PPE when handling and wash thoroughly after handling (see Section 8).
Waste Disposal Considerations	Dispose in accordance with federal, state, and local regulations.
Contaminated Packaging	Dispose in accordance with federal, state, and local regulations.

NOTES:

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

Section 14. TRANSPORT INFORMATION

UN Number:	NA
UN Proper Shipping Name:	NA
Transport Hazard Class:	NA
Packing Group:	NA
Marine Pollutant?:	NO
IATA	Not regulated
DOT	Not regulated

NOTES:

This product is not defined as a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, or by Transport Canada "Transportation of Dangerous Goods" regulations.

Special Precautions for Shipping:

The transportation information above covers the ABC 550 dry chemical extinguisher agent as shipped in bulk containers and not when contained in fire extinguishers or fire extinguisher systems. If shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/division is LIMITED QUANTITY when pressurized to less than 241 psig and when shipped via highway or rail. UN Class 2.2. Non-Flammable Gas, when shipping via air. Packing Group – N/A

Section 15. REGULATORY INFORMATION

International Inventory Status: All ingredients are on the following inventories

Country(ies)	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

REACH Title XVII Restrictions: No information available

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on Label	Pollution Release and Transfer Registry (Class II)	Pollution Release and Transfer Registry (Class I)	Poison and Deleterious Substances Control Law
Mono-ammonium Phosphate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Ammonium Sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Component	ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA – Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) – Toxic Chemicals	Toxic Release Inventory (TRI) – Group I	Toxic Release Inventory (TRI) – Group II
Mono-ammonium Phosphate 7722-76-1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Ammonium Sulphate 7783-20-2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Attapulgite clay	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Mica-potassium aluminum silicate 120001-26-2 (>2)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Calcium carbonate 471-34-1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Amorphous silica 69012-64-2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Yellow 14 pigment 5468-75-7	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

European Risk and Safety phrases:

EU Classification: XN Irritant
 R Phrases: 20 Harmful by inhalation.
 22 Harmful if swallowed

S Phrases:	36/37/38	Irritating to eyes, respiratory system, and skin.
	22	Do not breath dust.
	24/25	Avoid contact with skin and eyes
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing.
	37/39	Wear suitable gloves and eye protection.

U.S. Federal Regulatory Information:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) - This product does not contain and chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

SARA 311/312 Hazard Categories:

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
*-Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

* - Only applicable if material is in a pressurized extinguisher.

Clean Water/Clean Air Acts:

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) or Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) and Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulatory Information:

Chemicals in this product are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: None

California – Permissible Exposure Limits for Chemical Contaminants: None

Florida – Substance List: Mica Dust

Illinois – Toxic Substance List: None

Kansas – Section 302/303 List: None

Massachusetts – Substance List: Mica Dust

Minnesota – List of Hazardous Substances: None

Missouri – Employer Information/Toxic Substance List: None

New Jersey – Right to Know Hazardous Substance List: None

North Dakota – List of Hazardous Chemicals, Reportable Quantities: None

Pennsylvania – Hazardous Substance List: None

Rhode Island – Hazardous Substance List: Mica Dust

Texas – Hazardous Substance List: None

West Virginia – Hazardous Substance List: None

Wisconsin – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

Other:

Mexico – Grade

No component listed

Canada – WHMIS Hazard Class

Ammonium Sulfate listed as not a dangerous product according to HPR classification criteria

Section 16. OTHER INFORMATION

This Information Sheet complies with the requirements of US, UK, Canadian, Australian and European regulations or standards, and conforms to the proposed format, ANSI Z400.1, 2003. No modification of this safety data sheet is permitted by AMEREX Corporation. Questions or comments should be directed to AMEREX Corporation (see section 1).

Issuing Date

20-June-2012

Revision Date

8-July-2020; Revision B

Revision Notes

None

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by William F. Garvin, CIH.

Safety Data Sheet

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Product Name: CITADEL All-Purpose Grease #2

Product Grades/Codes: CITADEL All-Purpose Grease #2 – 1823500231 (Drum), 1823500243 (Keg), 1823500251 (Pail), 1823500298 (4x10 Pack)

1.2 Intended Use of the Product

See Technical Data Sheet.

1.3 Company Identification

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

1.4 Emergency Telephone Number

Emergency Number : CHEMTREC: (800)424-9300 or (703)527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 OSHA/HCS Status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

2.2 Classification of the Substance or Mixture:

Not Classified

2.3 GHS Label Elements

Signal Word: No signal word.

Hazard Statements: No known significant effects or critical hazards.

2.4 Precautionary Statements

Prevention: Not applicable

Response: Not applicable

Storage: Not applicable

Disposal: Not applicable

Hazards Not Otherwise Classified: None known

Safety Data Sheet

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance/Mixture: Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove person to fresh air and keep comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. If unconscious, place in the recovery position and seek medical attention immediately.

Skin Contact: In case of contact, immediately rinse skin with plenty of water. Remove contaminated clothing and shoes. If skin irritation occurs, seek medical attention. Launder contaminated clothing before reuse.

Eye Contact: In case of contact, immediately rinse eyes with plenty of fresh, clean water for at least 15 minutes. Remove contact lenses if present and continue rinsing. Seek medical attention immediately.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER, emergency medical center, or doctor/physician.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available.

4.4 Most Important Symptoms/Effects, Acute and Delayed

No known significant effects or critical hazards.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2 Special Hazards Arising from the Substance or Mixture

No specific fire or explosion hazard.

Safety Data Sheet

5.3 Hazardous Thermal Decomposition Products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, metal oxide/oxides

5.4 Special Protective Actions for Firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

5.5 Advice for Firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

6.2 Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and Material for Containment and Cleaning

Small Spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large Spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on General Occupation Hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Safety Data Sheet

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Occupational Exposure Limits: None

Appropriate Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

8.2 Individual Protection Measures

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

8.3 Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

Physical State	: Solid (Semi-Solid Gel)
Color	: Amber
Odor	: Mild Petroleum
Odor Threshold	: Not Available
pH	: Not Available
Melting Point	: Not Available
Boiling Point	: Not Available
Flash Point	: Not Available
Evaporation Rate	: Not Available
Flammability (solid, gas)	: Not Available
Upper/Lower Flammability or Explosive limits	
Lower Explosive Limit	: Not Available

Safety Data Sheet

Upper Explosive Limit	: Not Available
Vapor Pressure	: < 0.13 kPa (< 1 mm Hg) [room temperature]
Vapor Density	: Not Available
Relative Density	: Not Available
Solubility	: Not Available
Partition Coefficient: N-Octanol/Water	: Not Available
Auto-Ignition Temperature	: Not Available
Decomposition Temperature	: Not Available
Viscosity	: Not Available
Flow Time (ISO 2431)	: Not Available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability

The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

No specific data.

10.5 Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

There is no data available.

Information on the Likely Routes of Exposure:

Dermal contact. Eye contact. Ingestion.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

There is no data available.

Safety Data Sheet

12.2 Persistence and Degradability

There is no data available.

12.3 Bioaccumulative Potential

There is no data available.

12.4 Mobility in Soil

There is no data available.

12.5 Mobility in Soil

No known significant effects or critical hazards

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

14.1 Regulations

	DOT Classification	IMDG	IATA
UN Number	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-
Transport Hazard Class(es)	-	-	-
Packing Group	-	-	-
Environmental Hazards	No.	No.	No.

AERG: Not Applicable

14.2 Special Precautions for User

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Safety Data Sheet

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations:

United States Inventory (TSCA 8b):	All components are listed or exempted.
Clean Air Act Section 112: (b) Hazardous Air Pollutants (HAPS)	Not Listed
Clean Air Act Section 602: Class I Substances	Not Listed
Clean Air Act Section 602: Class II Substances	Not Listed
DEA List I Chemicals: (Precursor Chemicals)	Not Listed
DEA List II Chemicals: (Essential Chemicals)	Not Listed

15.2 Saturate, Aromatic, Resin and Asphaltene (SARA)

SARA 302/304 Composition/Information on Ingredients

No Products Were Found

SARA 304 RQ

Not Applicable

SARA 311/312 Composition/Information on Ingredients

No Products Were Found

SARA 313 Composition/Information on Ingredients

No Data Available

15.3 State Regulations

Massachusetts: The following components are listed: Distillates (petroleum), hydrotreated heavy, naphthenic

New York: None of the components are listed.

New Jersey: None of the components are listed.

Pennsylvania: None of the components are listed.

California Prop. 65: This product does not require a Safe Harbor warning under California Prop. 65.

Safety Data Sheet

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 2/06/2020

Other Information : This information has been compiled from sources considered to be dependable and is accurate to the best of our North American Lubricants Company's knowledge.

Party Responsible for the Preparation of This Document

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. North American Lubricants Company assumes no responsibility for injury from the use of the product described herein.

North America GHS US 2012 & WHMIS 2

Safety Data Sheet

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: PURATECH Motor Oil

Product Grades/Codes:

PURATECH SYN-Blend SAE 5W-20 GF-6A/SP- 1210130110 (Bulk), 1210130120 (330G Tote), 1210130118 (320G Tote), 1210130121 (Tote), 1210130130 (Drum), 1210130163 (6 Gal Box), 1210130171 (12x1Q Case)

PURATECH SYN-Blend SAE 5W-30 GF-6A/SP – 1210140110 (Bulk), 1210140120 (330G Tote), 1210140118 (320G Tote), 1210140121 (Tote), 1210140130 (Drum), 1210140163 (6 Gal Box), 1210140171 (12x1Q)

PURATECH SYN-Blend SAE 10W-30 GF-6A/SP – 1210170110 (Bulk), 1210170120 (330G Tote), 1210170121 (Tote), 1210170130 (Drum), 1210170163 (6 Gal Box), 1210170171 (12x1Q)

PURATECH Supreme SAE 10W-40 SP - 1010180110 (Bulk), 1010180121 (Tote), 1010180130 (Drum)

PURATECH Supreme SAE 20W-50 SP – 1010220110 (Bulk), 1010220121 (Tote), 1010220130 (Drum)

Synonyms: PURATECH

1.2. Intended Use of the Product

Engine Oil.

1.3. Company Identification

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252

www.nalube.com

1.4. Emergency Telephone Number

Emergency Number : CHEMTREC: (800)424-9300 or (703)527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not Classified

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) : Not Classified

Signal Word (GHS-US) :

Hazard Statements (GHS-US) : None Required

Precautionary Statements (GHS-US) : P273 - Avoid release to the environment.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Safety Data Sheet

2.3. Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

2.4. Unknown Acute Toxicity (GHS-US)

None of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Petroleum distillates, solvent dewaxed	(CAS No) 64742-65-0	75.75 – 95, 64 - 85	Not Classified
heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic	(CAS No) 64742-54-7	0 – 11, 10 - 17	Not Classified
Paraffin oils*	(CAS No) 8012-95-1	0 - 0.1, 0.1- 1, 1 - 5	Not Classified
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	(CAS No) 68649-42-3	0.45 - 0.891	Aquatic Chronic 3, H402

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Safety Data Sheet

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: No known significant effects or critical hazards.

Inhalation: Overexposure may be irritating to the respiratory system.

Skin Contact: Repeated or prolonged skin contact may cause irritation.

Eye Contact: Direct contact with the eyes is likely irritating.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: No known significant effects or critical hazards.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable but will support combustion.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

Safety Data Sheet

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2 Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3 Methods and material for Containment and Cleaning Up

For Containment: Contain any spills and dikes or absorbents to prevent migration and entry into sewers or streams.

Method for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers.

Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Engine Oil.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Paraffin oils (8012-95-1)		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen highly and severely refined, Suspected Human Carcinogen highly and severely refined
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³
USA IDLH	US IDLH (mg/m ³)	2500 mg/m ³
Alberta	OEL STEL (mg/m ³)	10 mg/m ³
Alberta	OEL TWA (mg/m ³)	5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.2 mg/m ³ (mildly refined) 1 mg/m ³ (severely refined)
Manitoba	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
New Brunswick	OEL STEL (mg/m ³)	10 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	5 mg/m ³ (as sampled by a method that does not collect vapor)
Newfoundland & Labrador	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nova Scotia	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nunavut	OEL STEL (mg/m ³)	10 mg/m ³
Nunavut	OEL TWA (mg/m ³)	5 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	10 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	5 mg/m ³
Ontario	OEL TWA (mg/m ³)	5 mg/m ³ (pure, highly and severely refined, excluding metal working fluids-inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Québec	VECD (mg/m ³)	10 mg/m ³ (mist)
Québec	VEMP (mg/m ³)	5 mg/m ³ (mist)
Saskatchewan	OEL STEL (mg/m ³)	10 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	5 mg/m ³
Yukon	OEL STEL (mg/m ³)	10 mg/m ³
Yukon	OEL TWA (mg/m ³)	5 mg/m ³

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Safety Data Sheet

Personal Protective Equipment: Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber
Odor	: Slight Hydrocarbon
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Boiling Point	: 271 °C (520 °F)
Flash Point	: 232 °C (COC) (450 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 0.85
Solubility	: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: 50 mm ² /s @ 40 °C
Explosive Properties	: Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge

Safety Data Sheet

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates : carbon oxides (CO, CO₂). Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Not Classified

Safety Data Sheet

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Paraffin oils (8012-95-1)	
LC50 Inhalation Rat	2062 ppm/4h
ATE US (gases)	2,062.00 ppmV/4h
IARC Group	1
Heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2 g/kg
Petroleum distillates, solvent dewaxed (64742-65-0)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5 g/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Toxic to aquatic life.

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

LC50 Fish 1	1.0 - 5.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1 - 1.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	10.0 - 35.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])

Petroleum distillates, solvent dewaxed (64742-65-0)

EC50 Daphnia 1	> 1000 mg/L (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)

LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

Not available

12.3. Bioaccumulative Potential

Not available

12.4. Mobility in Soil

Not available

Safety Data Sheet

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes : Delayed (chronic) health hazard

15.2. US State Regulations

Paraffin oils (8012-95-1)

U.S. California : Right To Know List – Warning: This material may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the warning requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5)

U.S. Massachusetts : Right To Know List

U.S. New Jersey : Right to Know Hazardous Substance List

U.S. Pennsylvania : RTK (Right to Know) List

15.3. Canadian Regulations

WHMIS Classification : Not Classified

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification : Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Paraffin oils (8012-95-1)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

Safety Data Sheet

IDL Concentration 1 %

WHMIS Classification : Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Petroleum distillates, solvent dewaxed (64742-65-0)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification : Uncontrolled product according to WHMIS classification criteria

Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification : Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 06/04/2020

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

H402 : Harmful to aquatic life.

P273 : Avoid release into the environment.

P501 : Dispose of contents/container in accordance with local, regional, national, and international regulations.

Party Responsible for the Preparation of This Document

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. North American Lubricants Company assumes no responsibility for injury from the use of the product described herein.

North America GHS US 2012 & WHMIS 2

Safety Data Sheet

SDS# 6063, Version 1.0
Effective Date 06/01/2023

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture**Product Name:** PURAMAX Premium 5000+ AW**Product Grades/Codes:**

PURAMAX Premium 5000+ AW 32 – 2111356210 (Bulk), 2111356221 (Tote), 2111356230 (Drum), 2111356250 (Pail)

PURAMAX Premium 5000+ AW 46 – 2111376210 (Bulk), 2111376221 (Tote), 2111376230 (Drum), 2111376250 (Pail)

PURAMAX Premium 5000+ AW 68 – 2111396210 (Bulk), 2111396221 (Tote), 2111396230 (Drum), 2111396250 (Pail)

PURAMAX Premium 5000+ AW 100 – 2111406210 (Bulk), 2111406221 (Tote), 2111406230 (Drum), 2111406250 (Pail)

Synonyms: Hydraulic Fluid

1.2. Intended Use of the Product

Hydraulic Fluid

1.3. Company Identification

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

1.4. Emergency Telephone Number

Emergency Number : CHEMTREC: (800)424-9300 or (703)527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not Classified

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling**Hazard Pictograms (GHS-US)** : None Required**Signal Word (GHS-US)** : Not Hazardous**Hazard Statements (GHS-US)** : None Required**Precautionary Statements (GHS-US)** : P273 - Avoid release to the environment.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Safety Data Sheet

SDS# 6063, Version 1.0
Effective Date 06/01/2023

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

2.3. Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

2.4. Unknown Acute Toxicity (GHS-US)

9.73 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Petroleum distillates, solvent dewaxed	(CAS No) 64742-65-0	75.75 – 95, 64 - 85	Not Classified
heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic	(CAS No) 64742-54-7	0 – 11, 10 - 17	Not Classified
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	(CAS No) 68649-42-3	0.7 - 2.7	Aquatic Chronic 3, H402

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: No known significant effects or critical hazards.

Inhalation: Overexposure may be irritating to the respiratory system.

Skin Contact: Repeated or prolonged skin contact may cause irritation.

Eye Contact: Direct contact with the eyes is likely irritating.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: No known significant effects or critical hazards.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable but will support combustion.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Any proposed use of this product in elevated-temperature processes should be thoroughly

Safety Data Sheet

evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Hydraulic Fluid.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Amber

Safety Data Sheet

SDS# 6063, Version 1.0
Effective Date 06/01/2023

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Odor	: Slight Hydrocarbon
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Boiling Point	: Not available
Flash Point	: 204C / 400F
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 0.85
Solubility	: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: Not available
Explosive Properties	: Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** No decomposition expected under normal use and storage conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified**LD50 and LC50 Data:** Not available**Skin Corrosion/Irritation:** Not classified**Eye Damage/Irritation:** Not classified**Respiratory or Skin Sensitization:** Not classified**Germ Cell Mutagenicity:** Not classified

Safety Data Sheet

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Overexposure may be irritating to the respiratory system.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause irritation.

Symptoms/Injuries After Eye Contact: Direct contact with the eyes is likely irritating.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse gastrointestinal effects.

Chronic Symptoms: Not Classified

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2 g/kg
Petroleum distillates, solvent dewaxed (64742-65-0)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5 g/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Toxic to aquatic life.

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
LC50 Fish 1	1.0 - 5.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1 - 1.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	10.0 - 35.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
Petroleum distillates, solvent dewaxed (64742-65-0)	
EC50 Daphnia 1	> 1000 mg/L (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

Not available

12.3. Bioaccumulative Potential

Not available

12.4. Mobility in Soil

Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Safety Data Sheet

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

- 14.1. In Accordance with DOT** Not regulated for transport
14.2. In Accordance with IMDG Not regulated for transport
14.3. In Accordance with IATA Not regulated for transport
14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes	Not Classified
--	----------------

15.2. US State Regulations

Paraffin oils (8012-95-1)

U.S. - California - Right To Know List – Warning: This material may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the warning requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

WHMIS Classification	Not Classified
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Petroleum distillates, solvent dewaxed (64742-65-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Safety Data Sheet

Revision Date : 06/01/2023**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.**GHS Full Text Phrases:**

P273	Avoid release into the environment
P501	Dispose of contents/container in accordance with local, regional, national, and international regulations.

Party Responsible for the Preparation of This Document

North American Lubricants Company
7337 E. Doubletree Ranch Road, Suite 180
Scottsdale, AZ 85258
(800)430-6252
www.nalube.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2

Safety Data Sheet



1. Identification

Product Name:	STRUST +SSPR 6PK GLOSS BLACK	Revision Date:	7/20/2023
Product Identifier:	7779830	Supersedes Date:	2/21/2023
Recommended Use:	Topcoat/Aerosols		
Supplier:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	Manufacturer:	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
Preparer:	Regulatory Department		
Emergency Telephone:	24 Hour Hotline: 847-367-7700		

2. Hazards Identification

Classification

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

33% of the mixture consists of ingredient(s) of unknown acute toxicity.

GHS HAZARD STATEMENTS

Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
STOT, Single Exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.
Carcinogenicity, category 1B	H350	May cause cancer.
Reproductive Toxicity, category 1B	H360	May damage fertility or the unborn child.
STOT, Repeated Exposure, category 2	H373	May cause damage to organs.
Gases under Pressure; Compressed Gas	H280	Contains gas under pressure; may explode if heated.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P280	Wear protective gloves / protective clothing / eye protection / face protection.

P405	Store locked up.
P501	Dispose of contents and container in accordance with local, regional and national regulations.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P317	Get medical help.
P319	Get medical help if you feel unwell.
P337+P317	If eye irritation persists: Get medical help.

3. Composition / Information on Ingredients

HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Acetone	67-64-1	25-50	GHS02-GHS07	H225-319-332-336
Propane	74-98-6	10-25	GHS04	H280
n-Butane	106-97-8	2.5-10	GHS04	H280
n-Butyl Acetate	123-86-4	2.5-10	GHS02-GHS07	H226-336
Barium Sulfate	7727-43-7	2.5-10	GHS07	H332
Xylenes (o-, m-, p- Isomers)	1330-20-7	2.5-10	GHS02-GHS07	H226-315-319-332
Dimethyl Carbonate	616-38-6	2.5-10	GHS02-GHS06	H225-331
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	2.5-10	GHS08	H304
Carbon Black	1333-86-4	1.0-2.5	Not Available	Not Available
Propylene Glycol Monobutyl Ether	5131-66-8	1.0-2.5	GHS07	H302-315-319
Ethylbenzene	100-41-4	1.0-2.5	GHS02-GHS07-GHS08	H225-304-332-373
Solvent Naphtha, Light Aromatic	64742-95-6	0.1-1.0	GHS07-GHS08	H304-332-340-350
n-Heptane	142-82-5	0.1-1.0	GHS02-GHS07-GHS08	H225-304-315-336
Octane	111-65-9	0.1-1.0	GHS02-GHS07-GHS08	H225-304-315-336
Zirconium 2-Ethylhexanoate	22464-99-9	0.1-1.0	GHS07-GHS08	H315+H320-360
Cobalt 2-Ethylhexanoate	136-52-7	0.1-1.0	GHS08	H360
Naphtha, Hydrotreated Heavy	64742-48-9	0.1-1.0	GHS08	H304-340-350
Zirconium Acetate	5153-24-2	<0.1	Not Available	Not Available

4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed. Remove contact lenses, if present and easy to do. Continue rinsing.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. FLASH POINT IS LESS THAN -7°C (20°F). EXTREMELY FLAMMABLE LIQUID AND VAPOR!

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Water may be used to cool closed containers to prevent buildup of steam. Full protective equipment including self-contained breathing apparatus should be used. If water is used, fog nozzles are preferred. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120°F (49°C). Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Contents under pressure. Do not expose to heat or store above 120°F (49°C). Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

Advice on Safe Handling of Combustible Dust: No Information

8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Acetone	67-64-1	30.0	250 ppm	500 ppm	1000 ppm	N.E.
Propane	74-98-6	20.0	N.E.	N.E.	1000 ppm	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
n-Butyl Acetate	123-86-4	10.0	50 ppm	150 ppm	150 ppm	N.E.
Barium Sulfate	7727-43-7	10.0	5 mg/m ³	N.E.	15 mg/m ³	N.E.
Xylenes (o-, m-, p- Isomers)	1330-20-7	10.0	20 ppm	N.E.	100 ppm	N.E.
Dimethyl Carbonate	616-38-6	5.0	N.E.	N.E.	N.E.	N.E.
Naphtha, Petroleum, Hydrotreated Light	64742-49-0	5.0	N.E.	N.E.	N.E.	N.E.
Carbon Black	1333-86-4	5.0	3 mg/m ³	N.E.	3.5 mg/m ³	N.E.
Propylene Glycol Monobutyl Ether	5131-66-8	5.0	N.E.	N.E.	N.E.	N.E.

Ethylbenzene	100-41-4	5.0	20 ppm	N.E.	100 ppm	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	1.0	N.E.	N.E.	N.E.	N.E.
n-Heptane	142-82-5	1.0	400 ppm	500 ppm	500 ppm	N.E.
Octane	111-65-9	1.0	300 ppm	N.E.	500 ppm	N.E.
Zirconium 2-Ethylhexanoate	22464-99-9	1.0	5 mg/m3	10 mg/m3	5 mg/m3	N.E.
Cobalt 2-Ethylhexanoate	136-52-7	1.0	N.E.	N.E.	N.E.	N.E.
Naphtha, Hydrotreated Heavy	64742-48-9	1.0	N.E.	N.E.	N.E.	N.E.
Zirconium Acetate	5153-24-2	0.1	5 mg/m3	10 mg/m3	5 mg/m3	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Specific Gravity:	0.777	pH:	N.A.
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/water:	N.D.
Decomposition Temp., °C:	N.D.	Explosive Limits, vol%:	0.9 - 13.0
Boiling Range, °C:	-37 - 3,000	Flash Point, °C:	-96
Flammability:	Supports Combustion	Auto-Ignition Temp., °C:	N.D.
Evaporation Rate:	Faster than Ether	Vapor Pressure:	N.D.
Vapor Density:	Heavier than Air		

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

Conditions to Avoid: Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition. Avoid excess heat. Keep from freezing.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

11. Toxicological Information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, and may injure eye tissue if not removed promptly. Causes Serious Eye Irritation

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation. Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

Stops Rust Gloss Protective Enamel Black Aerosol 6-Pack

Prolonged or excessive inhalation may cause respiratory tract irritation.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. IARC lists Ethylbenzene as a possible human carcinogen (group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
7727-43-7	Barium Sulfate	307000 mg/kg Rat	N.E.	N.E.
1330-20-7	Xylenes (o-, m-, p- Isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
616-38-6	Dimethyl Carbonate	13000 mg/kg Rat	>5000 mg/kg Rabbit	>5.36 mg/L Rat
64742-49-0	Naphtha, Petroleum, Hydrotreated Light	>5000 mg/kg Rat	>3160 mg/kg Rabbit	>4951 mg/L Rat
1333-86-4	Carbon Black	>15400 mg/kg Rat	N.E.	N.E.
5131-66-8	Propylene Glycol Monobutyl Ether	1900 mg/kg Rat	>2000 mg/kg Rat	N.E.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
142-82-5	n-Heptane	N.E.	3000 mg/kg Rabbit	>73.5 mg/L Rat
111-65-9	Octane	N.E.	N.E.	>24.88 mg/L Rat
136-52-7	Cobalt 2-Ethylhexanoate	N.E.	>5000 mg/kg Rabbit	N.E.
64742-48-9	Naphtha, Hydrotreated Heavy	>6000 mg/kg Rat	>5000 mg/kg Rabbit	N.E.

N.E. - Not Established

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components. Product is a mixture of listed components. No ecotoxicity data was found for this product.

13. Disposal Information

DISPOSAL: Dispose of material in accordance with local, state, and federal regulations and ordinances. Do not incinerate closed containers. This product as supplied is a US EPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation. EPA Hazardous Waste Number (RCRA): D005 (Barium). Dispose of in accordance with U.S. EPA 40 CFR 262 for concentrations at or above the Regulatory level. Regulatory level- 100.0 mg/L.

14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	Aerosols
Hazard Class:	N.A.	2	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	Yes	Yes	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Reproductive toxicity, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure), Germ cell mutagenicity

SARA Section 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Barium Sulfate	7727-43-7
Xylenes (o-, m-, p- Isomers)	1330-20-7
Ethylbenzene	100-41-4
Cobalt 2-Ethylhexanoate	136-52-7

Toxic Substances Control Act

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

California Proposition 65

WARNING:

Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

16. Other Information**HMIS RATINGS**

Health: 2* Flammability: 4 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 4 Instability: 0

Maximum Incremental Reactivity: 0.94

SDS REVISION DATE: 7/20/2023

REASON FOR REVISION:

Product Composition Changed
Substance and/or Product Properties Changed in
Section(s):
02 - Hazard Identification
03 - Composition / Information on Ingredients
09 - Physical & Chemical Properties
15 - Regulatory Information
16 - Other Information
Substance Hazard Threshold % Changed
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

SAFETY DATA SHEET

WINDOW CLEANER

SECTION 1 – CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT IDENTIFIER: WINDOW CLEANER
 PRODUCT USE: Window cleaner.
 VENDOR NAME AND ADDRESS: Alpine Specialty Chemicals Ltd.
 9 City View Drive, Etobicoke, Ontario M9W 5A5
 24 HOUR EMERGENCY NO. 613-996-6666 (CANUTEC)

SECTION 2 – HAZARDS IDENTIFICATION

CLASSIFICATION

- EYE DAMAGE/ EYE IRRITATION Category 2A AQUATIC TOXICITY (ACUTE) - Category 2

LABEL ELEMENTS



- SIGNAL WORD: WARNING
- HAZARD STATEMENT(S): FLAMMABLE LIQUID, MAY CAUSE SKIN AND EYE IRRITATION
 PRECAUTIONARY STATEMENTS: Wear chemical safety glasses and nitrile gloves. Keep away from heat, sparks, open flame and hot surfaces. Dispose of contents/ containers in accordance with local regulations.
- Response: - IF ON EYES: Wash with plenty of water. Get medical attention.

IF SWALLOWED: Immediately call a poison center or doctor. Rinse mouth.

IF ON SKIN: Wash with plenty of water. Get medical attention. Take off contaminated clothes and wash it before reuse.

SECTION 3 – COMPOSITION / INFORMATION INGREDIENTS

CHEMICAL NAME	%	CAS.NO
Isopropanol	6	67-63-0

SECTION 4 – FIRST AID MEASURES

Inhalation: Remove source of exposure or move to fresh air. Call a poison centre or doctor if you feel unwell.
Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water or shower. Get medical attention or advise. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention or advice.
Ingestion: Immediately call a Poison Centre or doctor. Do not induce vomiting.

Note to physician: Treat symptomatically, no specific antidote. See toxicological information (section 11)

SAFETY DATA SHEET

WINDOW CLEANER

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable Extinguishing Media: Use water spray, fog or foam.

Unsuitable Extinguishing Media: None known

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide and carbon monoxide.

Advice for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear suitable protective clothing. Wear eye/face protection.

Environmental precautions: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.

Methods and materials for containment and cleaning up: Use a water rinse for final clean-up.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Ventilate adequately, otherwise wear an appropriate breathing apparatus. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling.

Storage Procedures: Keep containers closed when not in use. Store between the following temperatures: 5 to 40°C.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	ACGIH TLV	STEL	OSHA PEL		AIHA WEEL	
	TWA		TWA	Ceiling	8 hour TWA	Short term TWA Ⓢ
Isopropanol	200 ppm	400 ppm	Not available		Not available	

ACGIH= American Conference of Governmental Industrial Hygienists. TLV = Threshold Limit Value. TWA = Time-weighted Average. STEL = Short-term Exposure Limit OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. AIHA = AIHA Guideline Foundation. WEEL = Workplace Environmental Exposure Limit.

Appropriate Engineering Control: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual Protection Measure:

Eye/Face Protection: Do not get into eyes. Wear chemical safety goggles.

Skin Protection: No known effect after skin contact. Rinse with water.

Respiratory protection: Not required

Inhalation: No special measures required. Treat symptomatically.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid, clear, blue colour.

Odour: Pleasant scent.

SAFETY DATA SHEET

WINDOW CLEANER

pH :	6-7 (100 %)
Melting Point:	Not available
Boiling point:	Not available
Flash Point:	45 ° C
Vapour pressure:	Not available
Vapour density:	Not available
Evaporation Rate:	Not available
Flammability:	Not available
Explosive Limit:	Not available
Lower flammable/explosive limit:	Not available
Upper flammable/explosive limit:	Not available
Relative Density:	Approx. = 0.98 (Water = 1)
Viscosity:	Not available
Solubility in water:	Soluble
Auto ignition temperature	Not available
Partition coefficient - n-octanol/water:	Not available
Decomposition temperature:	Not available

SECTION 10 – STABILITY AND REACTIVITY

STABILITY:	Stable
INCOMPATIBILITY:	None
HAZARDOUS DECOMPOSITION PRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	No specific data.

SECTION 11 – TOXICOLOGICAL INFORMATION

Chemical Name	LC50	LD50 (rat)	LD50 (dermal)
isopropanol	16000 ppm (rat)	5045 mg/kg	12800 mg/kg (rabbit)

Routes of exposure: Skin contact, Eye contact, Ingestion.

Eye contact: Material may cause irritation.

Skin contact: No specific data.

Inhalation: No specific data.

Acute toxicity:

Eye contact: Causes eye irritation.

Skin contact: Not known significant effects.

Inhalation: Not known significant effects.

Ingestion: Not known significant effects.

SAFETY DATA SHEET

WINDOW CLEANER

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic .

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA

Reproductive toxicity: No evidence of reproductive toxicity or developmental toxicity.

STOT - single exposure irritating to respiratory system.

STOT - Not classified.

Aspiration hazard: Not classified.

SECTION 12 – ECOLOGICAL CONSIDERATION

Eco toxicity : This material may be harmful to aquatic life.

Bio accumulative potential Inorganic: The substance has no potential for bioaccumulation.

Mobility in soil: Not applicable.

Other adverse effects: Not known.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: In accordance with federal, provincial or local government requirements.

SECTION 14 – TRANSPORT INFORMATION

TDG Classification: UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL) CLASS 8 PG III
FLASH POINT 43.5 ° C

SECTION 15 – REGULATORY INFORMATION

Refer to section 2.

SECTION 16 – OTHER INFORMATION

EFFECTIVE DATE:

May 12, 2016: **Revision 1**

Prepared by: Lab Personnel

Phone: (416) 744-2120

Website: www.alpinechem.com

Disclaimer:

The information contained in this form is based on data from sources considered technically reliable and has been provided in good faith in accordance with the available material. It is provided as a service to the persons using the product but conditions of use and handling may involve other and additional consideration beyond our control. No warranty, expressed or implied, is made and we will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information in this form.