SAFETY DATA SHEETS

This SDS packet was issued with item:

078910324

N/A



JUN-AIR SJ-27F Material Safety Data Sheet

632492435

CITGO Petroleum Corporation P.O. Box 4689

P.O. Box 4689 MSDS No. Houston, TX 77210 Revision D

Revision Date 5/20/2011

IMPORTANT: This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

Emergency Overview

Physical State Liquid.

Color Light amber Odor Mild.

WARNING:

Aspiration hazard if swallowed.

If liquid material enters the lungs, it can cause severe damage.

Do not taste or swallow.

If swallowed, do not induce vomiting.

Spills may create a slipping hazard.

Hazard Rankings

HMIS NFPA

Health Hazard 1 1
Fire Hazard 1 1

Reactivity 0 0

* = Chronic Health Hazard

Protective Equipment

Minimum Recommended See Section 8 for Details







SECTION 1. PRODUCT IDENTIFICATION

Trade Name JUN-AIR SJ-27F Technical Contact (800) 248-4684

Product Number 632492435 Medical Emergency (832) 486-4700

CAS Number Mixture. CHEMTREC Emergency (800) 424-9300

(United States Only)

Product Family Speciality product

Synonyms Synthetic lubricating oil;

CITGO® Material Code: 632492435

SECTION 2. COMPOSITION

Component Name(s) CAS Registry No. Concentration (%)

Decanoic acid, ester with 2-ethyl-2-(hydroxymethyl)-1,3-propane diol 11138-60-6 60 - 100

octanoate

1-Naphthalenamine, N-phenyl-ar-(1,1,3,3-tetramethylbutyl)- 68259-36-9 <1

SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact.

Signs and Symptoms of Acute Exposure

Inhalation At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the

mucous membranes of the nose, the throat, bronchi, and lungs.

Eye ContactThis product can cause transient mild eye irritation with short-term contact with liquid sprays

or mists. Symptoms include stinging, watering, redness, and swelling.

Skin Contact	This material can cause mild skin irritation from prolonged or repeated skin contact.
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Injection under the skin can cause inflammation and swelling. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor.

Injection of petroleum hydrocarbons requires immediate medical attention.

Ingestion If swallowed, large volumes of material can cause generalized depression, headache,

drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If

aspirated into the lungs, liquid can cause lung damage.

Chronic Health Effects

Summary

This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or

oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or

other pulmonary effects.

Conditions Aggravated

by Exposure

Disorders of the following organs or organ systems that may be aggravated by significant

exposure to this material or its components include: Skin

Target Organs May cause damage to the following organs: skin.

Carcinogenic Potential This product is not known to contain any components at concentrations above 0.1% which

are considered carcinogenic by OSHA, IARC or NTP.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).									
OSHA Health Hazard Classification			OSHA Physical Hazard Classification						
Irritant Toxic Corrosive		Sensitizer Highly Toxic Carcinogenic		Combustible Flammable Compressed Gas		Explosive Oxidizer Organic Peroxide		Pyrophoric Water-reactive Unstable	

SECTION 4. FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation Vaporization is not expected at ambient temperatures. This material is not expected to cause

inhalation-related disorders under anticipated conditions of use. In case of overexposure,

move the person to fresh air.

Eye Contact Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while

occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness,

or pain persists.

Skin Contact If burned by hot material, cool skin by quenching with large amounts of cool water. For

contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean

contaminated clothing before reuse. Clean or discard contaminated leather goods. If material

is injected under the skin, seek medical attention immediately.

Ingestion Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless

directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek

medical attention immediately.

Notes to Physician INGESTION: If ingested, this material presents a significant aspiration and chemical

pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

SECTION 5. FIRE FIGHTING MEASURES

NFPA Flammability

Classification

NFPA Class-IIIB combustible material.

Flash Point Open cup: 258°C (496°F) (Cleveland.).

Lower Flammable Limit No data. Upper Flammable Limit No data.

Autoignition

Temperature

390°C (734°F)

Products

Hazardous Combustion Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of

sulfur and/or nitrogen.

Special Properties This material can burn but will not readily ignite. This material will release vapors when

> heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays

may burn at temperatures below the flash point.

Extinguishing Media Use dry chemical, foam, carbon dioxide or water fog. Water or foam may cause frothing.

Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon

dioxide or inert gas in confined spaces.

Protection of Fire

Fighters

Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or

decomposition products and oxygen deficiencies.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

> Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

SECTION 7. HANDLING AND STORAGE

Handling

Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Avoid contamination and extreme temperatures.

Empty containers may contain product residues that can ignite with explosive force. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Protect containers against physical damage. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

Storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Storage area must meet OSHA requirements and applicable fire codes. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.



Eye Protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.

Hand Protection

None required for incidental contact. Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.

Body Protection

Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

Respiratory Protection

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

General Comments

Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

Occupational Exposure Guidelines

Substance Mineral Oil

Applicable Workplace Exposure Levels **ACGIH TLV (United States).**

TWA: 5 mg/m³ 8 hour(s). STEL: 10 mg/m³ 15 minute(s). **OSHA PEL (United States).** TWA: 5 mg/m³ 8 hour(s).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

Physical State Liquid. Color Light amber Odor Mild.

Specific Gravity <1 (Water = 1) pH No data. Vapor >1 (Air = 1)

Density

20

Boiling Range Not available. Melting/Freezing Not available.

Point

Vapor Pressure <0.1 kPa (<1 mm Hg) (at 20°C) Volatility Negligible volatility.

Solubility in Negligible solubility in cold water. Viscosity

Water (cSt @ 40°C)

Flash Point Open cup: 258°C (496°F) (Cleveland.).

Additional Gravity, °API (ASTM D287) = 18 @ 60° F

Properties Density = AP 7.89 Lbs/gal.

Viscosity (ASTM D2161) = AP 95 SUS @ 100° F

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous Polymerization Not expected to occur.

Conditions to Avoid Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.

Materials Strong oxidizers.

Incompatibility

Products

Hazardous No additional hazardous decomposition products were identified other than the combustion

Decomposition products identified in Section 5 of this MSDS.

SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data Decanoic acid, ester with 2-ethyl-2-(hydroxymethyl)-1,3-propane diol octanoate

ORAL (LD50): Acute: >5000 mg/kg [Rat].

Based upon animal test data on its components and similar products, slight to mild skin irritation may be expected from short-term exposure. Prolonged and/or repeated skin contact

may produce mild irritation and inflammation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Based on component information

EC50 (48 hour) (static) Daphnia magna > 1000mg/l

No observed effect concentration(48 hour) Daphnia magna 1000mg/l EC50 (72 hour) (biomass) selenastrum capricornutum >1000mg/l

EC50 (72 hour) (growth rate) selenastrum capricornutum >1000mg/l

Environmental Fate

Biodegradability: Readily biodegradable in aerobic conditions based on component

information

Partition Coefficient (log Kow): Not available

Photodegradation: Not available

Stability in Water: Not readily susceptible to hydrolysis under aquatic conditions.

Distribution: Principally to soil and sediment.

SECTION 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

> Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose this product's empty container to heat, flame, or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

SECTION 14. TRANSPORT INFORMATION

The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

Not regulated by the U.S. Department of Transportation as a hazardous material. **US DOT Status**

Proper Shipping Name Not regulated.

Placard(s)

Hazard Class Not regulated. **Packing Group** Not applicable.

> **UN/NA Number** Not regulated.

> > Not applicable.

Reportable Quantity A Reportable Quantity (RQ) has not been established for this material.

Guide No.

MARPOL III Status Not determined.

Emergency Response



SECTION 15. REGULATORY INFORMATION

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

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SARA 302/304 Emergency Planning and Notification The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 311/312 Hazard Identification

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

No SARA 311/312 hazard categories identified.

SARA 313 Toxic Chemical Notification and Release Reporting This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.

Clean Water Act

(CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

California
Proposition 65

This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

New Jersey Right-to-Know Label

For New Jersey R-T-K labeling requirements, refer to components listed in Section 2.

Additional Remarks

No additional regulatory remarks.

SECTION 16. OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number 1.00 Revision Date 5/20/2011

ABBREVIATIONS

AP: Approximately EQ: Equal >: Greater Than <: Less Than

NA: Not Applicable ND: No Data NE: Not Established

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association IARC: International Agency for Research on Cancer

NIOSH: National Institute of Occupational Safety and Health NPCA: National Paint and Coating Manufacturers Association

EPA: US Environmental Protection Agency
HMIS: Hazardous Materials Information System
OSHA: Occupational Safety and Health Administration

NTP: National Toxicology Program

NFPA: National Fire Protection Association

DISCLAIMER OF LIABILITY

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THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

SAFETY DATA SHEET

JUN-AIR SJ-27F



Section 1. Identification

GHS product identifier

: JUN-AIR SJ-27F

Chemical name

: Name

Synonyms

: Synthetic lubricating oil

Material uses

: Synthetic Compressor Oil

Code

: 632492435

MSDS#

: 632492435

Supplier's details

: CITGO Petroleum Corporation

P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com

Emergency telephone number (with hours of

operation)

: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700

CHEMTREC Emergency: (800) 424-9300

(United States Only)

Section 2. Hazards identification

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.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word

: No signal word.

Hazard statements

: No known significant effects or critical hazards.

Precautionary statements

General

: Avoid contact with eyes, skin and clothing. Thoroughly wash exposed areas and clothing with soap and water. IF IN EYES: Rinse cautiously with water for several minutes. IF SWALLOWED: Do not induce vomiting. If you feel unwell, seek medical

attention and show the label when possible. Keep out of reach of children.

Prevention : Not applicable. : Not applicable. Response

: Store in a dry place and/or in closed container. Store in accordance with all local, Storage

regional, national and international regulations.

Dispose of contents and container in accordance with all local, regional, national and **Disposal**

international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Chemical name

: Name

Other means of identification

: Synthetic lubricating oil

CAS number/other identifiers

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Section 3. Composition/information on ingredients

CAS number : Not applicable.

Any concentration shown as a range is to protect confidentiality or is due to process variation.

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

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Do not induce vomiting unless directed to do so by medical

personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: Treat symptomatically and supportively.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

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Section 5. Fire-fighting measures

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

Special protective actions for fire-fighters

: 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.

Special protective equipment for fire-fighters : 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

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. 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".

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).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). 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

Precautions for safe handling

Protective measures

Advice on general occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- : 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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. See Section 10 for incompatible materials before handling or use.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Environmental exposure controls

- : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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 glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. 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 inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: Chemical-resistant 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

: Avoid skin contact with liquid. 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. Leather boots are not protective for liquid contact.

Respiratory protection

: Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Light amber

Odor : Mild.

pH : Not available.Boiling point : Not available.

Flash point : Open cup: 250°C (482°F) [Cleveland.]

Evaporation rate : <1 (butyl acetate = 1)

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : <0.13 kPa (<1 mm Hg) [room temperature]

Vapor density : >1 [Air = 1] Relative density : 0.94

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Section 9. Physical and chemical properties

Density lbs/gal : 7.8 lbs/gal

Density gm/cm³ : Not available.

Gravity, °API : 18

Solubility : Insoluble in the following materials: cold water.

Auto-ignition temperature : 390°C (734°F) **Flow time (ISO 2431)** : Not available.

Viscosity : Kinematic (40°C (104°F)): 0.201 cm²/s (20.1 cSt)

Viscosity SUS : 95 SUS @100 F

Section 10. Stability and reactivity

Reactivity: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

Chemical stability: The product is stable.

Possibility of hazardous

reactions

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

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary : Decanoic acid, ester with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol octanoate:

Based upon animal test data on its components and similar products, slight to mild skin irritation may be expected from short-term exposure. Prolonged and/or repeated skin

contact may produce mild irritation and inflammation.

Irritation/Corrosion

Not available.

Skin : No additional information.Eyes : No additional information.Respiratory : No additional information.

Sensitization

Not available.

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity
Not available.

Conclusion/Summary: No additional information.

Carcinogenicity

Not available.

Conclusion/Summary: No additional information.

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Section 11. Toxicological information

Reproductive toxicity

Not available.

Conclusion/Summary

: No additional information.

Teratogenicity
Not available.

Conclusion/Summary: No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Routes of entry anticipated: Dermal.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

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Section 12. Ecological information

Toxicity

Not available.

: Not available. **Conclusion/Summary**

Persistence and degradability

Not available.

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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

	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.

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.

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Section 14. Transport information

Transport in bulk according to Annex II of MARPOL and

: Not available.

the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts: None of the components are listed.New York: None of the components are listed.New Jersey: None of the components are listed.Pennsylvania: None of the components are listed.

International regulations

Inventory list

United States : All components are listed or exempted.

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : **Japan inventory (ENCS)**: All components are listed or exempted.

Japan inventory (ISHL): Not determined.

Malaysia : Not determined.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.Taiwan: All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

Viet Nam : Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification		
Not classified.			

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Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

▼ Indicates information that has changed from previously issued version.

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