

Material Safety Data Sheet

Prepared according to 29 CFR 1910.1200

1. Chemical Product and Company Identification

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Product Name	Grade No. 2 Heating Oil S-15 Dyed
Product Code	8177
CAS Number	64742-80-9
Generic Chemical Name	Petroleum distillate
Product Type	Substance
Transportation Emergency Phone No.	Chemtrec: 1-800-424-9300 (24 HRS)
ARG Emergency Phone No.	814-368-1297 (24 HRS)
MSDS E-Mail	msds@amref.com

2. Hazards Identification

Appearance	Red liquid
Odor	Petroleum Oil
Signal Word	WARNING! Flammable liquid and vapor Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor and may cause flash fire May be fatal if swallowed. Can enter lungs and cause damage Harmful if inhaled Causes skin irritation Causes mild eye irritation May cause chronic effects
OSHA Regulatory Status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Precautions	Keep away from heat, sparks and flame. Keep container tightly closed. Use only with adequate ventilation. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.
Inhalation	Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.
Eyes	Avoid contact with eyes. Wash thoroughly after handling.
Skin	Avoid contact with skin and clothing. Wash thoroughly after handling.
Medical Conditions Aggravated by Exposure	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product

2. Hazards Identification

Chronic Effects See Section 11 for complete health hazard information
Environmental Effects See Section 12 for complete ecological information

3. Composition / Information on Ingredients

CAS No.	Component	Percent
64742-80-9	Distillates (petroleum), hydrodesulfurized middle	100

4. First Aid Measures

Eyes Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water. Get medical attention immediately.

Note to Physicians No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire Fighting Measures

Flammable Properties

This product is a static accumulating liquid. Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Restrict flow velocity to avoid build-up of static charge. Refer to NFPA 77, API 2003, and CENELEC CLC/TR 50404 for further guidance.

Extinguishing Media

Use dry chemical, CO₂, water spray (FOG) or foam

Specific Hazards Arising from Chemical

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposition products may include the following materials: Carbon dioxide and Carbon monoxide.

Protective Equipment and Precautions 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.

6. Accidental Release Measures

Personal Precautions

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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.

Methods for Containment

Stop leak if without risk.

Methods for Cleanup

Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and Storage

Handling Procedures

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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

Shipping and Storing Procedures

Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers that retain product residue may be hazardous. Do not reuse container.

8. Exposure Controls / Personal Protection

Component Exposure Limits

There are no regulatory exposure limits, however the recommended exposure limit is TWA (Time Weighted Average): 100 mg/m³ (8 hours)

Engineering Controls

Material should be handled in enclosed vessels and equipment. Use only in adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Chemical goggles or face shield.

Eye/Face Protection

Skin Protection

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.

General Hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of

8. Exposure Controls / Personal Protection

the working period. Appropriate techniques should be used to remove potentially contaminated clothing.

9. Physical and Chemical Properties

Color	Red	Vapor Pressure (mm Hg at 20°C)	<1
Odor	Petroleum Oil	Water Soluble	No
Physical State	Liquid	Specific Gravity (g/cc)	.88
Flash Point (°F)	100	Density (lbs/gal)	7.3
Boiling Point (°F)	>400	pH	Not available

10. Chemical Stability & Reactivity Information

Stability	Stable under normal conditions. If heated, product's static accumulation will rise and could cause flash fire.
Polymerization	No polymerization
Incompatibility	Strong acids and oxidizing materials
Conditions to Avoid	High temperatures, sparks, flames
Hazardous Decomposition Products	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

11. Toxicological Information

Acute Exposure	
Respiratory Irritation	Aspiration and inhalation hazard. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.
Eye Irritation	Causes mild eye irritation. Vapors formed from heating may cause eye irritation.
Skin Irritation	Causes skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness, dermatitis or oil acne.
Sensitization	Not expected to cause skin or respiratory sensitization.

Component Analysis – LD50 / LC50

Acute Toxicity Estimate (ATE) Values for Product:

Inhalation LC50 Rat	>18 mg/L 1 HR
Oral LD50 Rat	>5000 mg/kg
Dermal LD50 Rabbit	>2000 mg/kg

Chronic Exposure

Target Organ Effects

13 week rat study: LOAEL: 30-125 mg/kg NOAEL: ≤30 mg/kg

Carcinogenicity

Dermal carcinogenicity studies indicate that Gas oils and distillate fuels are

potential skin carcinogens after repeated skin application but are not associated with the induction of systemic tumors.

Mutagenicity

In vitro genetic toxicity studies demonstrate that gas oil streams and distillate fuels generally induce gene mutation in bacterial and mammalian cells. In vivo studies evaluating cytogenetic damage of a selection of gas oils indicate that most of these substances do not induce chromosome damage or statistically significant increases in micronucleus formation in bone marrow of treated animals when administered orally, dermally or by inhalation, the most realistic routes of human exposure.

Teratogenicity

LOAEL: 125-500 mg/kg
NOAEL: 30-500 mg/kg

Reproductive Toxicity

The NOAEL for reproductive toxicity is not expected to be lower than the NOAEL for developmental toxicity because the most sensitive endpoints in either developmental or reproductive toxicity studies are expected to be effects on fetal survival and growth resulting from in utero exposure.

LOAEL: Lowest Observed Adverse Effect Level

NOAEL: No Observed Adverse Effect Level

12. Ecological Information

Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species
96 Hr LC50
Pimephales promelas

Concentration/Conditions
N/A mg/L

Degradability Not determined
Bioaccumulation Not determined
Soil Mobility Not determined

13. Disposal Considerations


Disposal Instructions

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

14. Transportation Information

Emergency Response Guide No.	128	<i>North American Emergency Response Guide Book</i>			
	NA Number	Shipping Name (technical name)	Hazard Class	Packing Group	Labels/Placard*

14. Transportation Information

U.S. DOT Bulk	1993	Fuel Oil	Combustible Liquid	III	 <p>Bulk container must be labeled on two opposing sides</p>
U.S. DOT Non-Bulk		Not Regulated			Exempt from labeling and placarding unless shipped via Air or Vessel

*Truck/Rail car must be placarded on all 4 sides if aggregate gross weight exceeds 1,000 pounds

15. Regulatory Information

SARA Extremely Hazardous Substances (Sections 302 & 304)

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Section 313

This product does not contain greater than 1.0% of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311 & 312 Classifications

Acute Hazard Yes
Chronic Hazard Yes
Fire Hazard Yes
Reactivity Hazard No

CERCLA

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

California Prop 65

This product contains chemical(s) known to the state of California to cause cancer and/or birth defects.

Clean Water Act / Oil Pollution Act

This product contains petroleum distillates and may be subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

Global Chemical Inventories

Inventory	Component
	All components
US TSCA	Present
EU	Present

Inventory	Component
Japan	Not available
Australia	Present
New Zealand	Present
Canada	Present
Switzerland	Not available
Korea	Not available
Philippines	Not available
China	Present
Taiwan	Present

16. Other Information

US NFPA Ratings

Health	Fire	Instability
2	2	0

HMIS Ratings

Health	Fire	Physical Hazards
2	2	0

Precautionary Labels

Signal Word

DANGER!

Flammable liquid and vapor

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor and may cause flash fire

May be fatal if swallowed. Can enter lungs and cause damage

Harmful if inhaled

Causes skin irritation

Causes mild eye irritation

May cause chronic effects

Preparation/Revision Date

7/9/2012

Revision Reason

Outdated MSDS

Prepared By:

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The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS