



Safety Data Sheet

Prepared according to GHS

1. Identification

Product Name	Heating Oil #2 S-500 Dyed Red & Marked Yellow
Product Code	8105
Recommended Use	<i>Heating Oil</i>
Company	American Refining Group, Inc. 77 North Kendall Avenue Bradford, PA 16701 www.amref.com msds@amref.com
Emergency Telephone Number(s)	Chemtrec 1-800-424-9300 (24 HRS) ARG: 814-368-1297 (24 HRS)

2. Hazards Identification

GHS Classification	Germ Cell Mutagenicity Category 2 Carcinogenicity Category 2 Aspiration Hazard Category 1 Inhalation Hazard Category 4 Skin Corrosion/Irritation Category 2 Flammable Liquid Category 3
Signal Word	DANGER!
Hazard Statements	Suspected of causing genetic defects. Suspected of causing cancer. May be fatal if swallowed and enters airways. Harmful if inhaled. Causes skin irritation Flammable liquid and vapor
Other Hazard Information	Static accumulating liquid can become electrostatically charged even in bonded and grounded equipment Sparks may ignite liquid and vapor may cause flash fire. Liquid conductivity is <100 pS/m (picosiemens/meter) at 77°F
GHS Pictogram	
Precautionary Statements	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

2. Hazards Identification

Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention.
Store locked up
Dispose of contents/container to in accordance with local/national regulations.
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
Avoid breathing dust/fume/gas/mist/ vapors/spray.
Use only outdoors or in a well-ventilated area.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Wash thoroughly after handling.
If on skin: take off immediately all contaminated clothing. Wash with plenty of soap and water.
If skin irritation occurs: get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Keep away for heat/sparks/open flames/hot surfaces. – no smoking
Keep container tightly closed
Ground/bond container and receiving equipment.
Use explosion proof electrical/ventilating/lighting equipment.

3. Composition / Information on Ingredients

CAS No.	Component	Common Name	Percent
68476-34-6	Fuels, Diesel, No. 2	Petroleum Distillate	100%

4. First Aid Measures

Eyes Check for and remove any contact lenses. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation occurs.

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. Seek medical attention immediately.

Symptoms(Acute and delayed) Exposure to high concentrations of vapors may cause irritation to the eyes, nose and throat, nausea, dizziness and loss of consciousness.

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

4. First Aid Measures

ingested or inhaled.

5. Fire Fighting Measures

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

Avoid solid water stream as it may scatter and spread fire.

Specific Hazards Arising from Chemical

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

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.

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

Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment

Stop leak if without risk.

Methods for Cleanup

A vapor suppressing foam may be used to reduce vapors. Cover liquid spill with sand, earth or other noncombustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled container

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,

7. Handling and Storage

dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers that retain product residue may be hazardous.

Incompatibilities:

Oxidizing Agents

8. Exposure Controls / Personal Protection

Component Exposure Limits

Diesel Fuel, as total hydrocarbons

ACGIH TLV:	TWA: N/A ppm	TWA: 100 mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
OSHA PEL:	TWA: N/A ppm	TWA N/A ppm	STEL: N/A ppm	STEL: N/A mg/m ³
NIOSH REL:	TWA: N/A ppm	TWA N/A ppm	STEL: N/A ppm	STEL: N/A mg/m ³

N/A signifies not available

Engineering Controls

This product is a static accumulating liquid. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. 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.

Eye/Face Protection

Chemical goggles and face shield.

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

9. Physical and Chemical Properties

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Please see the Product Specification Sheet for further information.

Appearance	Red	Flammability	Flammable
Physical State	Liquid	Upper/Lower Flammability Limits	Not Available
Odor	Solvent	Vapor Pressure	Not Available
Odor Threshold	Not Available	Vapor Density	Not Available
pH	Not Available	Relative Density (lbs/gal)	Not Available
Melting/Freezing Point (°F)	Not Available	Water Soluble	No
Initial Boiling Point (°F)	Not available	Partition Coefficient: n-	3.3 to 6

9. Physical and Chemical Properties

		octanol/water	
Boiling Range (°F)	Not Available	Auto-ignition Temperature (°F)	Not Available
Flash Point (°F)	100	Decomposition Temperature (°F)	Not Available
Evaporation Rate	Not Available	Viscosity (40°C mm²/s)	4.1

10. Chemical Stability & Reactivity Information

Reactivity	Polymerization will not occur
Chemical Stability	Stable under normal conditions. If heated product's static accumulation will rise and could cause flash fire.
Hazardous Reactions	None, under normal processing.
Conditions to Avoid	High temperatures, flames, sparks
Incompatibility	Strong acids and oxidizing materials
Hazardous Decomposition Products	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

11. Toxicological Information

Acute Exposure	
Respiratory Irritation	An inhalation hazard may only arise if product is used in aerosol conditions or if heated up. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and upper respiratory tract.
Eye Irritation	May cause eye irritation. Itchiness may occur.
Skin Irritation	Causes skin irritation. Itchiness and redness varies with exposure.
Sensitization	Not expected to cause skin or respiratory sensitization.
Aspiration Hazard	If swallowed can be aspirated into lungs and cause chemical pneumonia, varying degrees of pulmonary injury or death. If swallowed, do NOT induce vomiting.
Chronic Exposure	
Target Organ Effects	No data available to indicate product or components at greater than 1% are chronic health hazards.
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. The skin carcinogenicity of the petroleum streams with high boiling ranges has been demonstrated to correlate with 3-7 ring PAC content. Diesel exhaust fumes are considered carcinogenic by IARC.
Mutagenicity	Based on in vitro studies, modeled mutagenic index greater than or equal to 1 with metabolic activation; predicts that the sample is mutagenic. Based on in vivo studies, the sample is considered negative for cytogenetic effects.

Reproductive Toxicity No data available to indicate either product or components present at greater than .1% that may cause reproductive toxicity.

Teratogenicity No data available to indicate product or any components contained at greater than .1% may cause birth defects.

Analysis – LD50 / LC50

Inhalation LC50 Rat	1.78 mg/L
Oral LD50 Rat	>5000 mg/kg
Dermal LD50 Rabbit	>2000 mg/kg

12. Ecological Information

Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species	Concentration/Conditions
96 hr LL50 Aquatic Vertebrates	3.2-65 mg/L
96 hr EL50 <i>Raphidocelis subcapitata</i>	2.2-78 mg/L
7 Day EL50 <i>Daphnia magna</i>	2.0-210 mg/L

Persistence & Degradability Inherently biodegradable
Bioaccumulation Potential Not Available
Soil Mobility Not Available
Other Adverse Effects Not Available

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

North American Emergency Response Guide Book

	UN Number	Shipping Name (technical name)	Hazard Class	Packing Group	Placard
U.S. DOT Bulk	1993	Fuel Oil	Combustible Liquid	III	
U.S. DOT Non-Bulk		Not Regulated		Exempt from labeling and	

14. Transportation Information

				placarding unless shipped via Air or Vessel	
IATA	1202	Fuel Oil	3	III	
IMDG	1202	Fuel Oil	3	III	

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 No
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 produces fumes when burnt suspected to contain chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

Global Chemical Inventories

Inventory	
US TSCA	Present
EU	Present
Japan	Not available
Australia	Present

New Zealand	Present
Canada	Present
Switzerland	Not available
Korea	Present
Philippines	Present
China	Present
Taiwan	Present

16. Other Information

US NFPA Ratings

Health	Fire	Reactivity
2	2	0

HMIS Ratings

Health	Fire	Physical Hazards
2	2	0

Revision Date

29 May 2015

Revision Reason

New SDS

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 SDS