



Safety Data Sheet

Prepared according to GHS

1. Identification

Product Name	Kensol K-1
Product Code	4112
Recommended Use	<i>Kerosene for heaters</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	Flammable Liquids Category 3 Aspiration Hazard Category 1 Eye Irritation Category 2B Skin Irritation Category 2 Specific Target Organ Toxicity-Single Exposure (narcotic effects) – Category 3 Static Accumulating Liquid
Signal Word	DANGER!
Hazard Statements	Flammable liquid and vapor May be fatal if swallowed and enters airways. Causes eye irritation Causes skin Irritation May cause respiratory irritation; or May cause drowsiness or dizziness
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

Do not breathe mist or vapors
Use only outdoors or in a well-ventilated area
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center/doctor if you feel unwell.

2. Hazards Identification

If swallowed: immediately call a poison center or doctor.
Do NOT induce vomiting.
Store Locked up
Store in a well-ventilated place.
Wear protective gloves/clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. –No smoking
Keep container tightly closed
Ground/bond container and receiving equipment. This alone may be insufficient to remove static electricity.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools
If on skin: take of immediately all contaminated clothing. Rinse skin with water/shower.
Store in a well-ventilated place. Keep cool.
Wash thoroughly after handling.
If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: get medical attention/advice.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Dispose of contents in accordance with local/regional/national/international regulations

3. Composition / Information on Ingredients

CAS No.	Component	Common Name	Percent
8052-41-3	Stoddard solvent	Mineral Spirits	40-50%
64742-47-8	Petroleum Distillates, Hydrotreated Light	Hydrotreated Finished Oil	40-50%

Hazardous Constituents contained in complex substances

CAS No.	Component	Common Name	Percent
111-84-2	Nonane	Nonane	0.5-4.0
25551-13-7	Trimethyl Benzene (mixed Isomers)	Hemellitene, Pseudocumene, mesitylene	0.25-2.5

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.

4. First Aid Measures

Ingestion

DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water.

Symptoms(Acute and delayed)

Exposure to high concentrations of vapors may cause irritation to the eyes, nose and throat, nausea, and dizziness.

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

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 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. Use absorbent pads or earthen dams to contain.

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.

7. Handling and Storage

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.**Incompatibilities:**

Oxidizing Agents

8. Exposure Controls / Personal Protection

Component Exposure Limits

Stoddard Solvent

ACGIH TLV:	TWA: 100 ppm	TWA: N/A mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
OSHA PEL:	TWA: 500 ppm	TWA 2900 mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
NIOSH REL:	TWA: N/A ppm	TWA 350 mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
NIOSH Ceiling:	1800 mg/m ³ (15 minutes)			

Nonane

ACGIH TLV:	TWA: 200 ppm	TWA: N/A mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
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Trimethyl Benzene (all isomers)

ACGIH TLV:	TWA: 25 ppm	TWA: N/A mg/m ³	STEL: N/A ppm	STEL: N/A mg/m ³
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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

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	Colorless	Flammability	Not Available
Physical State	Liquid	Upper/Lower Flammability Limits	Not Available
Odor	Petroleum Solvent	Vapor Pressure (mm Hg at 20°C)	Not Available
Odor Threshold	Not Available	Vapor Density	Not Available
pH	Not Available	Relative Density (lbs/gal)	6.56
Melting/Freezing Point (°F)	Not Available	Water Soluble	No
Initial Boiling Point (°F)	>300	Partition Coefficient: n-octanol/water	Not Available
Boiling Range (°F)	300-572	Auto-ignition Temperature (°F)	Not Available
Flash Point (°F)	100.4	Decomposition Temperature (°F)	Not Available
Evaporation Rate	Not Available	Viscosity (40°C mm²/s)	1.5

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	Causes mild eye irritation that is reversible with proper care.
Skin Irritation	Causes mild skin irritation that is reversible with proper care.
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	Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia,

drowsiness, unconsciousness and other central nervous system effects including death.

Prolonged or repeated direct exposure to the skin results in symptoms of irritation and redness, dermatitis or oil acne.

Carcinogenicity No data available to indicate product or any components present at greater than .1% are carcinogenic.

Mutagenicity No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.

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	>5 mg/L (4Hr mist)
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 <i>Oncorhyncus mykiss</i>	8.2 mg/L
48 hr EL50 <i>Oncorhyncus mykiss</i>	32 mg/L
96 hr EL50 <i>Scenedesmus subspicatus</i>	45 mg/L
Chronic Survival NOELR Aquatic Vertebrates	2.6 mg/L
Chronic Growth NOELR Aquatic Vertebrates	2.6 mg/L
Chronic Survival NOELR <i>Daphnia magna</i>	16 mg/L
Chronic Reproduction EL 50 <i>Daphnia magna</i>	10 mg/L
Chronic reproduction NOELR <i>Daphnia magna</i>	2.6 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	<i>North American Emergency Response Guide Book</i>		
	UN Number	Shipping Name (technical name)	Hazard Class	Packing Group
U.S. DOT Bulk (over 119 gallons)	1223	Kerosene	Combustible Liquid	III
U.S. DOT Non-Bulk		Not Regulated		
STCC		4914256		



Exempt from labeling and placarding unless shipped via air or vessel

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 contains the following components in concentrations greater than 0.1% for carcinogenic substances and/or 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: 1,2,4 Trimethylbenzene (CASRN: 95-63-6): 2.7%	
SARA Section 311 & 312 Classifications	Physical Hazards	Yes <i>Flammable Liquid</i> <i>Static Accumulating Liquid</i>
	Health Hazards	Yes <i>Aspiration Hazard</i> <i>Eye Irritant</i> <i>Skin Irritant</i> <i>Specific Target Organ Toxicity</i>
CERCLA	This product contains the following components listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4: NONE	
California Prop 65	This product contains chemical(s) known to the state of California to cause	

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	Not available

* May be subject to TSCA 12b export notification. Contains Nonane (CASRN: 111-84-2) at 7 %.

16. Other Information

US NFPA Ratings

Health	Fire	Reactivity
1	2	0

HMIS Ratings

Health	Fire	Physical Hazards
1	2	0

Revision Date

2 November 2016

Revision Reason

Sections 14 and 15

The information provided on this SDS 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