Safety Data Sheet

Prepared according to GHS

1. Identification

Product Name	**Kensol® 48H**
Product Code	**4115**
Recommended Use	**Aluminum Rolling Oil/ Ink Oil**
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

Aspiration Hazard Category 1
Skin Corrosion/Irritation Category 2
Flammable liquids Category 4

Signal Word

DANGER!

Hazard Statements

May be fatal if swallowed and enters airways.
Causes skin irritation
Combustible liquid

GHS Pictogram

Precautionary Statements

If swallowed: immediately call a poison center/ doctor. Do NOT induce vomiting.
Wash thoroughly after handling.
Wear Protective Gloves.
If on skin: 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 from flames and hot surfaces.-No smoking.
Store in a well-ventilated place.
Dispose of contents in accordance with local/regional/national/ international regulations

3. Composition / Information on Ingredients

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CAS No.	Component	Common Name	Percent
64742-47-8	Petroleum Distillates, Hydrotreated light	Hydrotreated Distillate	100%

4. First Aid Measures

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

Skin In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if irritation develops.

Inhalation Move exposed person to fresh air. Avoid breathing fumes/mist/vapor.

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 ingested or inhaled.

5. Fire Fighting Measures

Suitable Extinguishing Media

Use dry chemical, CO_2, 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.

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. Earthen dams and diking if the spill is large quantities.

Methods for Cleanup

A vapor suppressing foam may be used to reduce vapors. Cover liquid spill with sand, earth or other

6. Accidental Release Measures

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

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Protect from light. Keep in properly labeled containers. Keep out of the reach of children.

Incompatibilities:

Oxidizing Agents

8. Exposure Controls / Personal Protection

Component Exposure Limits

Oil Mist (mineral)

ACGIH TLV:	TWA:	N/A ppm	TWA:	5 mg/m^3	STEL:	N/A ppm	STEL:	10 mg/m^3
OSHA PEL:	TWA:	N/A ppm	TWA	5 mg/m^3	STEL:	N/A ppm	STEL:	N/A mg/m^3
NIOSH REL:	TWA:	N/A ppm	TWA	5 mg/m^3	STEL:	N/A ppm	STEL:	10 mg/m^3

N/A signifies not available

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.

Eye/Face Protection — Chemical goggles or 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	Clear and bright	**Flammability**	Combustible liquid and vapor
Physical State	Liquid	**Upper/Lower**	Not Available

9. Physical and Chemical Properties			
		Flammability Limits	
Odor	Petroleum Oil	**Vapor Pressure (20℃ mm Hg)**	<0.1
Odor Threshold	Not Available	**Vapor Density**	Not Available
pH	Not Available	**Relative Density (lbs/gal)**	6.6
Melting/Freezing Point (℉)	Not Available	**Water Soluble**	No
Initial Boiling Point (℉)	391	**Partition Coefficient: n-octanol/water**	Not Available
Boiling Range (℉)	391-465	**Auto-ignition Temperature (℉)**	Not Available
Flash Point (℉) Tag Closed Cup D-56	160	**Decomposition Temperature (℉)**	Not Available
Evaporation Rate	Not Available	**Viscosity (40℃ mm²/s)**	1.8
Volatile Organic Compounds (g/L)	790.8	**Aromatic Content (Typical Vol %)**	11.5

10. Chemical Stability & Reactivity Information

Reactivity	Polymerization will not occur
Chemical Stability	Stable under normal conditions
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. Based on data from similar materials.
Eye Irritation	Not expected to cause eye irritation.
Skin Irritation	Causes skin irritation. Itchiness and redness vary 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	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than3% extractables by the IP

346 test.

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	24	mg/L
Oral LD50 Rat	>2000	mg/kg
Dermal LD50 Rabbit	>2000	mg/kg

12. Ecological Information

Component Analysis- Ecotoxicity – Aquatic Life

Duration/Test/Species	**Concentration/Conditions**	
96 Hr LL50; WAF Aquatic Vertebrates	18-25	mg/L
7 Day EL50; WAF *Daphnia magna*	1.4-21	mg/L

Persistence & Degradability Readily/Rapidly Biodegradable
Bioaccumulation Potential Not Available
Soil Mobility Not Available
Other Adverse Effects Not Available

- Kensol 48H is readily/rapidly biodegradable and will not persist in the aquatic environment. It therefore is not expected to cause short-term toxicity to aquatic organisms. Since Kensol 48H has a low solubility in water chronic aquatic toxicity is not expected.

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	Placards/Label
U.S. DOT		Not Regulated (Does not sustain combustion- 49 CFR 173.120(b)(3).)			
IATA		Not Regulated			
IMDG		Not Regulated			
STCC		2911425			

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

Physical Hazards Yes

Flammable Liquids

Health Hazards Yes

Aspiration Hazard
Eye Irritant
Skin Irritant
Specific Target Organ Toxicity

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 is not routinely tested to determine chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.

California Air Resource Board (CARB)
This product is considered a Low Vapor Pressure – Volatile Organic Compound (LVP-VOC) according to the CARB. This product meets one of the following requirements in order to be considered a LVP-VOC:

(A) has a vapor pressure less than 0.1 mm Hg at 20°C, as determined by ARB Method 310; or

(B) is a chemical "compound" with more than 12 carbon atoms, or a chemical "mixture" comprised solely of "compounds" with more than 12 carbon atoms, as verified by formulation data, and the vapor pressure and boiling point are unknown; or

(C) is a chemical "compound" with a boiling point greater than 216°C, as determined by ARB Method 310; or

(D) is the weight percent of a chemical "mixture" that boils above 216°C, as determined by ARB Method 310.

California Air Resource Board (CARB) Bin Number
15

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	Not Available
China	Present
Taiwan	Not available

16. Other Information

US NFPA Ratings

Health	Fire	Reactivity
1	1	0

HMIS Ratings

Health	Fire	Physical Hazards
1	1	0

Revision Date 19 October 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