



Safety Data Sheet

Prepared according to GHS

1. Identification

| | |
|--------------------------------------|---|
| Product Name | Kendex® 0897 |
| Product Code | 4555 |
| Recommended Use | <i>Used as a viscosity builder in metalworking fluids and straight oils.</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 | This product is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| Signal Word | Not applicable |
| Hazard Statements | Not applicable |
| Other Hazards | Not applicable |
| GHS Pictogram | Not applicable |
| Precautionary Statements | Not applicable |

3. Composition / Information on Ingredients

| CAS No. | Component | Common Name | Percent |
|--|-----------|-------------|---------|
| This Product does not contain ingredients that are hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). | | | |

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 develops. |
| Skin | In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops. |
| Inhalation | Move exposed person to fresh air. Get medical attention if irritation develops. |

4. First Aid Measures

Ingestion

First aid is normally not required. Get medical attention if discomfort develops.

Note to Physicians

No specific treatment. Treat symptomatically.

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.

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

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

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

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*

When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL.

*Product has 0 kPa pressure at 68°F and is not expected to present any inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Oil mist, if generated, is considered hazardous according to the OSHA Hazard Communication Standard.

8. Exposure Controls / Personal Protection**Engineering Controls**

Material should be handled in enclosed vessels and equipment only if aerosolized and/or misted. Use only in adequate ventilation if this occurs. 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

Safety glasses

Skin Protection

Normal work gloves are appropriate

Respiratory Protection

No special requirements under ordinary conditions of use and with adequate ventilation.

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 | Opaque | Flammability | Not Available |
| Physical State | Liquid | Upper/Lower Flammability Limits | Not Available |
| Odor | Petroleum Oil | Vapor Pressure | Not Available |
| Odor Threshold | Not Available | Vapor Density | Not Available |
| pH | Not Available | Relative Density (lbs/gal) | 7.62 |
| Melting/Freezing Point (°F) | Not Available | Water Soluble | No |
| Initial Boiling Point (°F) | Not Available | Partition Coefficient: n-octanol/water | >10 |
| Boiling Range (°F) | Not Available | Auto-ignition Temperature (°F) | Not Available |
| Flash Point (°F) | 575 | Decomposition Temperature (°F) | Not Available |
| Evaporation Rate | Not Available | Viscosity (100°C mm²/s) | 57.8 |

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

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

Products**11. Toxicological Information**

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Acute Exposure

| | |
|-------------------------------|--|
| Respiratory Irritation | Not Expected to pose respiratory irritation. |
| Eye Irritation | Not expected to cause eye irritation. |
| Skin Irritation | Not expected to cause skin irritation. |
| Sensitization | Not expected to cause skin or respiratory sensitization. |

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 than 3% 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 | 23.6 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; WAF Aquatic Vertebrates | >1000 mg/L |

| | |
|--|------------------|
| Persistence & Degradability | Readily degraded |
| 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

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Emergency Response Guide No. 171 *North American Emergency Response Guide Book*

| | UN Number | Shipping Name (technical name) | Hazard Class | Packing Group | Placard |
|-----------------|-----------|--------------------------------|--------------|---------------|---------|
| U.S. DOT | | Not Regulated | | | |
| IMDG | | Not Regulated | | | |
| IATA | | Not Regulated | | | |

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 No
Chronic Hazard No
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 product does not contain chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components.

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 |

16. Other Information

US NFPA Ratings

| Health | Fire | Reactivity |
|---------------|-------------|-------------------|
| 0 | 1 | 0 |

HMIS Ratings

| Health | Fire | Physical Hazards |
|---------------|-------------|-------------------------|
| 0 | 1 | 0 |

Revision Date

14 April 2015

Revision Reason

New SDS

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