### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Kia PVE Oil Viscosity ISO 68, 6 x 8 oz. Cans</th>
</tr>
</thead>
</table>

**Other means of identification**

<table>
<thead>
<tr>
<th>Product Code:</th>
<th>3438025-062</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

#### 1.2 Recommended use of the chemical and restrictions on use

<table>
<thead>
<tr>
<th>Recommended Use</th>
<th>Refrigerant Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against</td>
<td>No information available</td>
</tr>
</tbody>
</table>

#### 1.3 Details of the supplier of the safety data sheet

**Supplied by**

Idemitsu Lubricants America Corporation  
701 Port Rd.  
Jeffersonville, IN. 47130  
Telephone: 812-285-8234  
Fax: 812-285-8243  
Contact Name: Robin Hutchens  
Email: sds@ilacorp.com

**Manufactured by**

IDEMITSU KOSAN CO., LTD  
3-1-1 MARUNOUCHI CHIYODA-KU  
TOKYO JAPAN  
PHONE: +81-3-3213-3143

**24 Hour Emergency Phone Number**

Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: + 1 703-741-5970 (collect calls accepted)
2. HAZARDS IDENTIFICATION

2.1 Classification

This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS 2015

<table>
<thead>
<tr>
<th>Acute toxicity - Oral</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Gases)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>GHS Physical Hazard Category Number</td>
<td>None</td>
</tr>
</tbody>
</table>

2.2 Label elements

- Signal word: Warning
- Hazard statements: H361 - Suspected of damaging fertility or the unborn child
- Precautionary Statements - Prevention:
  - P201 - Obtain special instructions before use
  - P202 - Do not handle until all safety precautions have been read and understood
  - P280 - Wear protective gloves/protection/face protection
- Precautionary Statements - Response:
  - P308 + P313 - IF exposed or concerned: Get medical advice/attention
- Precautionary Statements - Storage:
  - P405 - Store locked up
- Precautionary Statements - Disposal:
  - P501 - Dispose of contents/ container to an approved waste disposal plant
- Hazards not otherwise classified (HNOC): Not applicable

2.3 Other information

- Other hazards:
  - May be harmful in contact with skin
  - May be harmful if swallowed
  - Harmful to aquatic life with long lasting effects
3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Not applicable

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tricresylphosphate</td>
<td>1330-78-5</td>
<td>1-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 First Aid Measures

General Advice
If symptoms persist, call a physician. Get medical advice/attention if you feel unwell. Take a copy of the Safety Data Sheet when going for medical treatment.

Eye Contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Get medical advice/attention if you feel unwell.

Inhalation
Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.

Ingestion
Do not induce vomiting without medical advice. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Call a physician or Poison Control Center immediately.

Protection of First-aiders
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms
No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties
NFPA: Class IIIB Combustible Liquid

5.1 Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media
No information available.
5.2 Specific Hazards Arising from the Chemical

Hazardous combustion products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to, Carbon oxides, Oxides of Phosphorus.

5.3 Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition. Avoid breathing vapors or mists. Ensure adequate ventilation.

6.2 Environmental Precautions

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for Clean-up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Spill Management

LARGE SPILLS

Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 Regulatory Information) notify the National Response Center.

WATER SPILLS

Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling

Wear personal protective equipment. Do not breathe vapors or spray mist. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Safe Handling Advice

Handle in accordance with good industrial hygiene and safety practices.

7.2 Conditions for safe storage, including any incompatibilities
Storage
Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.

Incompatible Materials and/or Coatings
No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2. Exposure controls

Appropriate engineering controls
Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal Protective Equipment

Eye/face protection
Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If splashes are likely to occur wear tight fitting safety goggles and/or face-shield.

Skin protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate to prevent skin contact. Glove Type: Neoprene, Nitriles.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Clean equipment, work area and clothing regularly.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear / Colorless</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 180 °C / 356 °F COC ASTM D92</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>No information available</td>
</tr>
</tbody>
</table>
Vapor Pressure
Vapor Density (Air)
Density
Solubility
Partition Coefficient (n-octanol/water)
Autoignition Temperature
Decomposing Temperature
Viscosity
No information available
No information available
0.94 g/cm³ @15°C
No information available
No information available
No information available
No information available
@ 40°C = 66.57 cSt; @ 100°C = 8.04 cSt

10. STABILITY AND REACTIVITY

10.1 Reactivity
Reactivity
The product is chemically stable

10.2 Chemical stability
Chemical Stability
Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions
Possibility of Hazardous Reactions
None under normal processing.

10.4 Conditions to Avoid
Conditions to Avoid
Heat, flames and sparks.

10.5 Incompatible Materials
Incompatible Materials
Strong oxidizing agents.

10.6 Hazardous Decomposition Products
Hazardous decomposition products
Thermal decomposition can lead to release of irritating gases and vapors.

11. TOXICOLOGICAL INFORMATION

11.1 Information on likely routes of exposure
Inhalation
May cause irritation of respiratory tract.
Eye contact
May cause slight irritation.
Skin Contact
May be harmful in contact with skin.
Ingestion
May be harmful if swallowed.

11.2 Information on toxicological effects
Symptoms
No information available

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure
Skin corrosion/irritation
Not classified.
Serious eye damage/eye irritation  Not classified.
Sensitization  Not classified.
Mutagenic effects  Not classified.

11.4 Carcinogenicity

Carcinogenicity  No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA, or ACGIH.

Legend:
NTP: (National Toxicity Program), ACGIH: (American Conference of Governmental Industrial Hygienists), IARC: (International Agency for Research on Cancer), OSHA: (Occupational Safety & Health Administration)

Reproductive Effects  Suspected of damaging fertility or the unborn child.
Developmental Effects  Not classified.
STOT - single exposure  Not classified.
STOT - repeated exposure  Not classified.
Aspiration hazard  Not classified.

11.5 Acute Toxicity

Unknown acute toxicity  0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

Product Information (Estimated):

<table>
<thead>
<tr>
<th>Product Information (Estimated)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (oral)</td>
<td>&gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>&gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>ATEmix (inhalation-vapor)</td>
<td>&gt; 20</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity
Ecotoxicity effects  Harmful to aquatic life with long lasting effects.
Unknown aquatic toxicity  98.7% of the mixture consists of components(s) of unknown hazards to the aquatic environment

12.2 Persistence and degradability  No information available.
12.3 Bioaccumulation/Accumulation  No information available.
12.4. Mobility in soil  No information available.
PBT and vPvB assessment  No information available.
12.5 Other adverse effects:  No information available.

13. DISPOSAL CONSIDERATIONS
Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

To minimize exposure, see Section 8 (Exposure Controls/Personal Protection) of the SDS.

**Waste Disposal Method**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**

Dispose of in accordance with local regulations.

### 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG/IMO**

Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>All ingredients are on the inventory or exempt from listing</td>
</tr>
<tr>
<td>DSL</td>
<td>Not all ingredients are listed on the DSL Inventory List</td>
</tr>
<tr>
<td>NDSL</td>
<td>Not Listed</td>
</tr>
<tr>
<td>EINECS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ELINCS</td>
<td>Not Listed</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>CHINA</td>
<td>All ingredients are on the inventory or exempt from listing</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>All ingredients are on the inventory or exempt from listing</td>
</tr>
<tr>
<td>NZIoC</td>
<td>Does not comply</td>
</tr>
<tr>
<td>Mexico (INSQ)</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>

#### USA

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazardous Categorization**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>
Reactive Hazard

No

CERCLA/SARA 302 & 304
Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 355.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any HAPs.

State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tricresylphosphate</td>
<td>1330-78-5</td>
<td>X</td>
</tr>
</tbody>
</table>

New Jersey Worker and Community Right-to-Know Act:
Contact Idemitsu Lubricants America for this information

Canada

This material has been classified in accordance with the WHMIS 2015 regulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-di-tert-butyl p-cresol</td>
<td>128-37-0</td>
<td>&lt;1</td>
<td>Listed</td>
</tr>
</tbody>
</table>

Legend
NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

NFPA
Health: 1
Flammability: 1
Instability: 0

Prepared By
Susie Bibb

Revision Date:
08-Apr-2015

Revision Summary:
GHS SDS format
Disclaimer:
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 Safety Data Sheet