



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs in accordance with the requirements of the OSHA Hazard Communication Standard in order to assist our customers in their compliance efforts. We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.





Sincerely,

Compliance Services

Zep Inc.



SAFETY DATA SHEET

Product Name:	PPE
Kia Pag Oil, 6 x 8oz Case	   

Revision Date: 14-May-2015

Revision Number: 2

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

1.1 Product Identifier

Product Name: Kia Pag Oil, 6 x 8oz Case

Other means of identification

Product Code: 3425025-062A

Synonyms: Not available

1.2 Recommended use of the chemical and restrictions on use

Recommended Use: Refrigerant Oil

Uses advised against: No information available

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

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Category 1A
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 2 - Testes
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified
Physical hazards	None

2.2. Label elements



Signal word

Hazard statements

Precautionary Statements - Prevention:

Precautionary Statements - Response:

Skin

Warning

H317 - May cause an allergic skin reaction
H361 - Suspected of damaging fertility or the unborn child if swallowed

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves and protective clothing
P280 - Wear face protection
P272 - Contaminated work clothing should not be allowed out of the workplace

P308 + P313 - IF exposed or concerned: Get medical advice/attention
P321 - Specific treatment (see supplemental first aid instructions on this label)
P362 + P364 - Take off all contaminated clothing and wash it before reuse

P302 + 352 - IF ON SKIN: Wash with plenty of soap and water
P363 - Wash contaminated clothing before reuse
P333 + P313 - If skin irritation or rash occurs: 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	<ul style="list-style-type: none">• Harmful to aquatic life with long lasting effects• Harmful to aquatic life
Unknown acute toxicity	0.9% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Name	CAS-No	Weight %	Notes
Polyether compound	Confidential	90-100	
Tricresylphosphate	1330-78-5	1-5	

- * The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

4.1 First Aid Measures

General Advice	If symptoms persist, call a physician. 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.
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.
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4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Flammable Properties

NFPA: Class IIIB Combustible Liquid

5.1 Suitable Extinguishing Media

Water fog, Carbon dioxide (CO₂), Foam, Dry chemical, Use water spray to cool unopened containers

Unsuitable Extinguishing Media

No information available.

5.2 Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

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 skin, eyes and clothing. Wear personal protective clothing (see section 8). Ensure adequate ventilation, especially in confined areas. Do not touch or walk through spilled material.

For emergency responders

Use personal protection recommended in Section 8. Ventilate the area. Do not get on skin or on clothing. Wash hands thoroughly after handling.

6.2 Environmental Precautions

Environmental Precautions

Should not be released into the environment. Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers).

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). Pick up and transfer to properly labeled containers.

Methods for Containment

Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers).

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**

Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not breathe vapors or spray mist. Ensure adequate ventilation.

Safe Handling Advice

Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities**Storage**

Store in tightly sealed containers to protect from atmospheric moisture. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

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**

Tightly fitting safety goggles. Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.

Skin protection

Impervious clothing. Additional body garments should be used based upon the task being performed to avoid exposed skin surfaces. **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. Clean equipment, work area and clothing regularly.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Clear Oily Liquid
Physical State	Liquid
Odor	Mild
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	> 200 °C / 392 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Explosion Limits	No information available
Vapor Pressure	No information available
Vapor Density (Air)	No information available
Density	0.99 g/cm ³ @15°C
Solubility	Insoluble
Partition Coefficient (n-octanol/water)	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Viscosity	@40C = 49.0 cSt; @100C=10.61 cSt

Other Information

DMSO extract by IP346	Not applicable
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10. STABILITY AND REACTIVITY**10.1 Reactivity**

Reactivity	The product is chemically stable
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10.2 Chemical stability

Chemical Stability	Stable under recommended storage conditions.
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10.3 Possibility of Hazardous Reactions

Possibility of Hazardous Reactions	None under normal processing.
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10.4 Conditions to Avoid

Conditions to Avoid	Heat, flames and sparks.
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10.5 Incompatible Materials

Incompatible Materials	Acids. Bases. Oxidizing agent.
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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 irritation.
Skin Contact	May cause an allergic skin reaction.
Ingestion	Harmful if swallowed. Contains a known or suspected reproductive toxin.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tricresylphosphate 1330-78-5	3000 mg/kg (Rat)	1701 mg/kg (Rabbit)	

11.2 Information on toxicological effects

Symptoms	No information available
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11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Sensitization	May cause sensitization by skin contact.
Mutagenic effects	No information available.

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.
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Legend:

NTP: (National Toxicity Program), ACGIH: (American Conference of Governmental Industrial Hygienists), Group 1 - Carcinogenic to Humans OSHA: (Occupational Safety & Health Administration)

Reproductive Effects	Contains a known or suspected reproductive toxin.
STOT - single exposure	None known.
STOT - repeated exposure	None known
Aspiration hazard	No information available.

11.5 Acute Toxicity

Unknown acute toxicity	0.9% of the mixture consists of ingredient(s) of unknown toxicity
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The following values are calculated based on chapter 3.1 of the GHS document .

Product Information (Estimated):

ATEmix (oral)	>5000 mg/kg
ATEmix (dermal)	>2200 mg/kg
ATEmix (inhalation-vapor)	5000 mg/l

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Ecotoxicity effects

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

Unknown aquatic toxicity

98.3% of the mixture consists of components(s) of unknown hazards to the aquatic environment

12.2 Persistence and degradability

The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

12.3 Bioaccumulation/Accumulation

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

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	All ingredients are on the inventory or exempt from listing		
DSL	Not all ingredients are listed on the DSL Inventory List		
NDSL	There are ingredients listed on the NDSL Inventory List		
<u>Chemical Name</u>	<u>NDSL</u>	<u>CAS-No</u>	<u>Weight %</u>
Phosphonic acid, di-9-octadecenyl ester	X	64051-29-2	<1
EINECS	All ingredients are on the inventory or exempt from listing		
ELINCS	Not Listed		
ENCS	All ingredients are on the inventory or exempt from listing		
CHINA	All ingredients are on the inventory or exempt from listing		
KECL	All ingredients are on the inventory or exempt from listing		
PICCS	All ingredients are on the inventory or exempt from listing		
AICS	Does not comply		
NZIoC	Does not comply		
Mexico	Does not comply		
REACH	All ingredients are on the inventory or exempt from listing		

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

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
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.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

State Right-to-Know

Chemical Name	CAS-No	New Jersey
Tricresylphosphate	1330-78-5	X

New Jersey Worker and Community Right-to-Know Act:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL (Lubricating Oil)

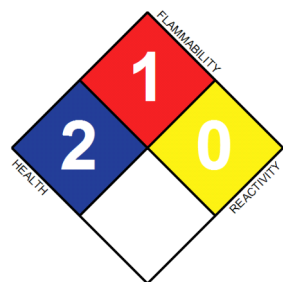
Canada

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

Chemical Name	CAS-No	Weight %	NPRI
2,6-di-tert-butyl p-cresol	128-37-0	<1	Listed
Isopropyl alcohol	67-63-0	NF	Listed

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

NFPA

Health: 2

Flammability: 1

Instability 0

Prepared By
Revision Date:

Robin Hutchens
14-May-2015

Revision Summary:

GHS SDS format
Section 2: HAZARDS IDENTIFICATION

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