

PREMIUM ORANGE 15W-40 MSDS

SECTION 1: Product and Company Identification

Product Name	HITACHI PREMIUM ORANGE 15W-40
Product code	34180460
Recommended Use	Lubricant

Details of the supplier of the safety data sheet

Manufacturer	Idemitsu Kosan Co., Ltd. 1-1 3-Chome Marunouchi Chiyoda-ku Tokyo, 100-8321, Japan Telephone: +81-3-3213-3143 Fax: +81-3-3211-5343
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Emergency telephone number	24 Hour Emergency Phone Number United States and Canada:+1 215 207 0061 Mexico:+52 555 004 8763 Brazil:+55 113 711 9144 East/South East Asia:+65 3158 1074 Korea +82 (0) 234 798 401(South Korea in country number) Australia +61 2801 44558 New Zealand +64 9929 1483
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SECTION 2: Hazards Identification

Classification Serious eye damage/eye irritation	Category 2A
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Label elements	
Emergency Overview	Warning
Hazard statements	Causes serious eye irritation.
Appearance	Opaque
Physical state	Liquid
Odour	Characteristic
Precautionary Statements - Prevention	Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Eyes	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 advice/attention.
Hazards not otherwise classified (HNOC)	Causes mild skin irritation. Not Applicable.
Other Information	6.2% of the mixture consists of ingredient(s) of unknown toxicity.

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SECTION 3: Composition/Information on Ingredients

Chemical name	CAS No	Weight-%	Trade Secret
PETROLEUM HYDROCARBON (MINERAL OIL)	-	>=90	*
LUBRICATING OIL ADDITIVE	-	<8	*
Zinc, dithiophosphate di-C1-14-alkyl esters	68649-42-3	<2	*

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

SECTION 4: First Aid Measures

First Aid Measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin Contact	Wash skin with soap and water.
Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products. (Get medical attention immediately if symptoms occur.)
Ingestion	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
Indication of any immediate medical attention and special treatment needed	

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media	CO2, dry chemical, dry sand, alcohol-resistant foam.
Unsuitable Extinguishing Media Caution:	Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.
Explosion Data	Sensitivity to Mechanical Impact none. Sensitivity to Static Discharge none.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

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SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation, especially in confined areas.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

SECTION 7: Handling and Storage

Precautions for safe handling

Advice on safe handling	Use personal protective equipment as required. Avoid breathing vapors or mists.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Store at ambient conditions. Store in accordance with local regulations.
Incompatible materials	None known based on information supplied.

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SECTION 8: Exposure Controls/Personal Protection

Control parameters

Exposure Guidelines

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

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
PETROLEUM HYDROCARBON (MINERAL OIL)	5mg/m ³	-	-
Chemical name	ACGIH TLV		
PETROLEUM HYDROCARBON (MINERAL OIL)	5mg/m ³		

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

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SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Colour	Dark brown
Appearance	Opaque
Physical state	Liquid
Odour	Characteristic
Property	Values/Remarks
pH	No data available
Melting point/freezing point:	
Melting point	No information available
Pour point	-37.5 °C
Freezing point	No information available
Initial boiling point	280 °C or more
Flash point	228 °C / 442 °F Cleveland Open Cup
Flammability Limits in Air	
Upper flammability limits	7vol%
Lower flammability limit	1vol%
Density @15°C	0.8784 g/cm ³
Water solubility	Insoluble in water
Kinematic viscosity 40°C	104.0 mm ² /s
Kinematic viscosity 100°C	13.97 mm ² /s
Dropping point	No information available.

SECTION 10: Stability and Reactivity

Reactivity	No data available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	Strong oxidizing agents. Heat, flames and sparks.
Incompatible materials	None known based on information supplied.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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SECTION 11: Toxicological Information

Information on likely routes of exposure

Product Information	No data available.
Inhalation	No data available.
Eye contact	Avoid contact with eyes.
Skin Contact	No data available.
Property	No data available.
Ingestion	No data available.

Information on toxicological effects

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

Serious eye damage/eye irritation	Irritating to eyes.
Sensitisation	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	Not classified.

Numerical measures of toxicity - Product Information

Unknown Acute toxicity	6.2% 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 .

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SECTION 12: Ecological Information

Ecotoxicity

6.2% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Zinc, dithiophosphate di-C1-14-alkyl esters 68649-42-3		2.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static		
Product Information			No data available.	
Inhalation			No data available.	
Eye contact			Avoid contact with eyes.	
Skin Contact			No data available.	

SECTION 13: Disposal Considerations

Waste treatment methods

Disposal of wastes	Improper disposal or reuse of this container may be dangerous and illegal.
Contaminated packaging	Do not reuse container.
Chemical name	California Hazardous Waste Status
Zinc, dithiophosphate di-C1-14-alkyl esters 68649-42-3	Toxic

SECTION 14: Transport Information

DOT	Not regulated.
TDG	Not regulated.
IATA	Not regulated.
IMDG	Not regulated.
ADR	Not regulated.
IBC	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated.
Proper shipping name	Not regulated.
CATEGORY	Not regulated.

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SECTION 15: Regulatory Information

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc, dithiophosphate di-C1-14-alkyl esters - 68649-42-3	68649-42-3	<2	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc, dithiophosphate di-C1-14-alkyl esters 68649-42-3		X		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65	This product does not contain any Proposition 65 chemicals.
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U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Zinc, dithiophosphate di-C1-14-alkyl esters 68649-42-3	X		X

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SECTION 15: Regulatory Information (Continued)

U.S. EPA Label Information

EPA Pesticide Registration Number	Not Applicable.
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International Inventories

ENCS	Complies
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TSCA	Complies
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EINECS/ELINCS	Complies
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DSL	Complies
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AICS	Complies
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KECL	Complies
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PICCS	Complies
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China (IECSC)	Complies
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SECTION 16: Other Information

Issue Date	24-Jan-2014
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Revision date	23-Feb-2015
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Revision Note	No information available
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Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.