

Genuine Axle Oil High Gear MSDS

SECTION 1: Identification of the Substance/Preparation and of the Company/Undertaking

Identification of substance/preparation	LUBRICATING OIL (HITACHI GENUINE AXLE OIL HIGH GEAR)
Application	The Gear Oil Construction Machinery and Industry Vehicles For specific application advice see appropriate Technical Service Sheet or consult your COSMO OIL LUBRICANTS representative
Company Identification	COSMO OIL LUBRICANTS CO.,LTD.
Address	33-7, Shiba 5-Chome, Minato-ku Tokyo, 108-0014 Japan
Emergency telephone	+81-3-3798-3875

SECTION 2: Hazards Identification

(EC) No 1272/2008	Not Classified
67/548/EC or 1999/45/EC	Not Classified
GHS Classification	Not Classified
Potential health effects	Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. For further health effects/toxicological data, see Section 11.

SECTION 3: Composition/Information on Ingredients

Chemical name	CAS-No	EC No	Weight %	DSD/DPD Classification	CLP Classification
Mineral oil	Confidential	Confidential	85-95	Note L	Note L
Additive	N.A.	N.A.	5-15	N.A.	N.A.

Note L

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. The producer of "Mineral oil" declares that it contains less than 3% DMSO extractable material by IP-346.

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SECTION 4: First-aid Measures

Eyes	Wash eye thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
Skin	Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.
Ingestion	If contamination of the mouth occurs, wash out thoroughly with water. Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do not induce vomiting; obtain medical advice.
Inhalation	If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. If symptoms persist obtain medical advice.
Medical advice	Treatment should in general be symptomatic and directed to relieving any effects. Aspiration of the product is unlikely to occur except as the result of ingestion, followed by vomiting or regurgitation in a partially or totally unconscious individual, when immediate effects are most likely to result from the aspiration of acidic stomach contents. If it should occur, transport casualty immediately to hospital.

SECTION 5: Fire-Fighting Measures

Directions	Use foam, dry powder or water fog. Do not use water jets. Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus. Water may be used to cool nearby heat exposed areas/objects/packages. Avoid spraying directly into storage containers because of the danger of boil-over.
Combustion Products	Toxic fumes may be evolved on burning or exposure to heat. See Stability and Reactivity, Section 10 of this Safety Data Sheet.

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SECTION 6: Accidental Release Measures

Directions

Ensure good ventilation.
Evacuate all non essential personnel from the immediate area.
Contain and recover spilled material using sand or other suitable inert absorbent material.
It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.
Spilled material may make surfaces slippery.
Protect drains from potential spills to minimize contamination. Do not wash product into drainage system.
In the case of large spills contact the appropriate authorities.

SECTION 7: Handling and Storage

Handling Precautions

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.
Avoid frequent or prolonged skin contact with fresh or used product.
Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.
Whilst using do not eat, drink or smoke.
Wash hands thoroughly after contact.
Use disposable cloths and discard when soiled.

Fire Prevention

Product soaked rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use. Empty containers represent a fire hazard as they may contain some remaining flammable product and vapour. Never cut, weld, solder or braze empty containers.

Storage Conditions

Store under cover away from heat and sources of ignition.
Containers must be properly labelled and kept closed when not in use.
Empty packages may contain some remaining product. Retain hazard warning labels on empty packages as a guide to the safe handling, storage and disposal of empty packaging.

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SECTION 8: Exposure Controls/Personal Protection

Exposure Limits	This product contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5mg per cubic meter, ACGIH STEL of 10mg per cubic meter.
Protective Clothing	Wear face visor or goggles in circumstances where eye contact can accidentally occur. Change heavily contaminated clothing as soon as reasonably practicable; dry clean,laundry and preferably starch before re-use. Wash any contaminated underlying skin with soap and water.
Respiratory Protection	Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled. The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.

SECTION 9: Physical and Chemical Properties

	Units	Typical Values
Physical state		Clear liquid
Colour		Yellow
Odour		Mild Oil Odour
Density @ 15°C	g/cm ³	0.90
Flash point (COC)	°C	>200
Pour point	°C	<-22.5
Solubility in Water		insoluble
Viscosity(@40°C)	mm ² /s	213.1

SECTION 10: Stability and Reactivity

Conditions to Avoid	Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use. Hazardous polymerization reactions will not occur. This material is combustible.
Materials to Avoid	Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions. Incomplete combustion/ thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

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SECTION 11: Toxicological Information

Acute toxicity	Oral. The LD50 in rat is > 5000mg/kg.
Dermal	The LD50 in rabbit is > 2000mg/kg.
Inhalation	The LC50 in rat is >2.18mg/L.
Skin corrosion/irritation	Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Serious eye damage/ irritation	Not expected to cause eye irritation. Based on data from components or similar materials.
Respiratory irritation	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.
Respiratory or skin sensitization	Skin No data available to indicate product or components may be a skin sensitizer. Respiratory No data available to indicate product or components may be a respiratory sensitizer.
Germ cell mutagenicity	No data available to indicate product or components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex 1. The producer of "Mineral oil" declares that it contains less than 3% DMSO extractable material by IP 346.
Reproductive toxicity	No data available to indicate either product or components at greater than 0.1% that may cause reproductive toxicity.
STOT repeated exposure	No data available to indicate product or components present at greater than 0.1% that may cause reproductive toxicity.
Other information	No other health hazards known.

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SECTION 12: Ecological Information

Ecotoxicity	No expected to be harmful to aquatic organisms.
Mobility	Spillages may penetrate the soil causing ground water contamination.
Persistence and degradability	This product is not expected to be readily biodegradable.
Bioaccumulative potential	There is no evidence to suggest bioaccumulation will occur.
Aquatic toxicity	May be harmful to aquatic organisms. Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

SECTION 13: Disposal Considerations

Where possible, arrange for product to be recycled.
Dispose of via an authorized person/ licensed waste disposal contractor in accordance with local regulations.
Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.
Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or onto soil.

SECTION 14: Transport Information

IMDG/IMO	Not Regulated
RID	Not Regulated
ADR	Not Regulated
ICAO	Not Regulated
IATA	Not Regulated

SECTION 15: Regulatory Information

DSD/DPD	This product is non-dangerous in accordance with Directive 1999/45/EC.
Labelling	Symbol(s) Not dangerous R-phrase(s) No information available. S-phrase(s) No information available.
CLP	This product does not meet the classification requirements of the current European legislation. Signal word: Not hazardous
GHS	Signal word: Not hazardous

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SECTION 16: Other Information

Complied by:

COSMO OIL LUBRICANTS CO.,LTD.
TECHNICAL DEPT.
Shiba, Minatoku, Tokyo Japan

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date specified below.

We have reviewed any information contained herein which we received from sources outside the Cosmo Oil Lubricants. However, no warranty or representation, express or implied is made as to the accuracy or completeness of the data and information contained in this data sheet. Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorization given or implied to practice any patented invention without a valid license. Cosmo Oil Lubricants shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.