

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 1: Identification of the Hazardous Chemical and of the Supplier

Product identifier

Product name	HITACHI GENUINE TRANSMISSION OIL 10W
Product code	30203007

Recommended use of the chemical and restrictions on use

Recommended use	Lubricant
Restrictions on use	None known.

Manufacturer or supplier's details

Company	Idemitsu Kosan Co., Ltd.
Address	1-1 3-Chome Marunouchi Chiyoda-ku Tokyo, 100-8321, Japan
Telephone	+81-3-3213-3143
Emergency telephone	+60 3 6207 4347
Telefax	+81-3-3211-5343

SECTION 2: Hazards Identification

Classification of the hazardous chemical	Not a hazardous substance or mixture.
Label elements	Not a hazardous substance or mixture.
Other hazards which do not result in classification	No information available.

SECTION 3: Composition and Information of the Ingredients of the Hazardous Chemical

Substance / Mixture	Mixture
Hazardous ingredients	No hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Mineral oil	-	>= 95
Lubricating oil additive	-	< 3
Total mineral oil concentration(% w/w)	>= 95	

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 4: First Aid Measures

General advice	Do not leave the victim unattended.
If inhaled	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of eye contact	Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
Recommended use	Lubricant
If swallowed	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	None known.

SECTION 5: Firefighting Measures

Extinguishing media

Physicochemical hazards arising from the chemical

Hazardous combustion products No hazardous combustion products are known

Special protective equipment and precautions for fire-fighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental Release Measures

Methods and materials for containment and cleaning up Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 7: Handling and Storage

Handling

Precautions for safe handling

Advice on protection against fire and explosion	Normal measures for preventive fire protection.
Advice on safe handling	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Storage

Conditions for safe storage, including any incompatibilities

Conditions for safe storage	Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	No materials to be especially mentioned.

SECTION 8: Exposure Controls and Personal Protection

Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	TWA (Mist)	5 mg/m ³	MY PEL
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	TWA (Mist)	5 mg/m ³	MY PEL
		TWA (Inhalable fraction)	5 mg/m ³	ACGIH

Individual protection measures, such as personal protective equipment

Eye/face protection	Safety glasses
Skin protection	Protective suit
Respiratory protection	No personal respiratory protective equipment normally required.
Hygiene measures	General industrial hygiene practice.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 9: Physical and Chemical Properties

Appearance	opaque
Physical state	liquid
Colour	brown
Odour	slight
Pour point	-40.0 °C
Initial boiling point and boiling range	No data available
Flash point	230 °C Method: Cleveland open cup
Relative vapor density	No data available
Density	0.8771 g/cm ³ (15 °C)
Solubility(ies) Water solubility	insoluble
Viscosity Viscosity, kinematic	40.01 mm ² /s (40 °C)

SECTION 10: Stability and Reactivity

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	No data available
Incompatible materials	Strong acids and strong bases
Hazardous decomposition products	No hazardous decomposition products are known.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 11: Toxicological Information

Information on likely routes of exposure	None known.
Acute toxicity	Not classified based on available information.
Skin corrosion/irritation	Not classified based on available information.
Serious eye damage/eye irritation	Not classified based on available information.
Respiratory or skin sensitization	Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.
Further information	
Product:	Remarks: No data available.

SECTION 12: Ecological Information

Ecotoxicity	No data available.
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	
Product:	Additional ecological information: No data available.

SECTION 13: Disposal Information

Disposal methods	
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 14: Transport Information

International Regulations

UNRTDG	Not regulated as a dangerous good.
IATA-DGR	Not regulated as a dangerous good.
IMDG-Code	Not regulated as a dangerous good.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable for product as supplied.

SECTION 15: Regulatory Information

Safety, health, and environmental regulations specific for the hazardous chemical

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

The ingredients of this product are reported in the following inventories:

ENCS	Listed.
TSCA	Listed.
EINECS	Listed.
REACH	For further information, please contact.
DSL	Listed.
AICS	Listed.
KECI	Listed.
PICCS	Listed.
IECSC	Conditional registration (Only certain businesses can export)
TCSI	Listed.
NZIoC	Listed.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 16: Other Information

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date format

dd.mm.yyyy

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.

GENUINE TRANSMISSION OIL 10W MSDS

SECTION 17: Additional Information

Typical Specifications

Test item	Unit	Products: 310 (10W)
Density (15°C)	g/cm ³	0.8760
ASTM colour	-	L3.0
Kinematic viscosity (40°C)	mm ² /s	40.45
Kinematic viscosity (100°C)	mm ² /s	6.40
Viscosity index	-	110
Flash point (COC)	°C	232
Total Acid number	mgKOH/g	1.60
Total Base number	mgKOH/g	9.82
Pour points	°C	-42.5

Comments

This oil can be used as transmission oil for Hitachi Construction Machine ZW series.