IDEMITSU

SAFETY DATA SHEET

Brioduct Name

Hitachi Hydraulic Oil Super EX 46HN, 55 Gallon Drum









Revision Date:

10-Apr-2015

Revision Number: 3

1-identification of the substance/preparation and of the company/undertaking

1.1 Product Identifier

Product Name:

Hitachi Hydraulic Oil Super EX 46HN, 55 Gallon Drum

Other means of identification

Product Code:

3220-021A

Synonyms

Not available

1.2 Recommended use of the chemical and restrictions on use

Recommended Use

Hydraulic Oil

Uses advised against

No information available

1.3. Details of the supplier of the safety data sheet

Manufactured 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 for

Deere & Company One John Deere Place Moline, IL 61265

Telephone: 1-800-822-8262

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 DENTIFICATION

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 - Oral Acute toxicity - Dermal	Not classified
Acute toxicity - Dermai Acute toxicity - Inhalation (Gases)	Not classified
	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	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Category 2 - Testes
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified
None	

2.2. Label elements



Signal wor	rd
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Hazard statements

Precautionary Statements - Prevention:

Precautionary Statements - Response:

Precautionary Statements - Storage:

Precautionary Statements - Disposal:

Hazards not otherwise classified (HNOC)

2.3 Other information

Other hazards

Warning

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

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical

advice/attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste

disposal plant

Not applicable

· May be harmful in contact with skin

· Harmful to aquatic life with long lasting effects

Unknown acute toxicity

1.95% of the mixture consists of ingredient(s) of unknown toxicity

S COMPOSITION INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous components

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4220.70 5	<i>-</i> 1
Tricresylphosphate 1330-78-5	`

Non-Hazardous Components

	NOII-Mazardous Components		
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	Chemical Name	THE REPORT OF THE PARTY OF THE	
- 1			05.00
	Mineral Base Stock	MIXTURE	95-99
	Willelai base Stock	17117 (7 0 1 ()	

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.

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

Do not use a solid water stream as it may scatter and spread fire.

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, Nitrogen oxides (NOx), 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, diatomaceus 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

Incompatible Materials and/or Coatings

Storage

Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.

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.

No information available

Other Exposure Guidelines (If Generated)

Other Exposure Guidennes (it	Ocheratea,					COPPERATION OF THE PARTY OF THE	BOUNDARY OF THE PROPERTY OF THE PARTY OF THE
Chemical Name	OSHA PEL	ACCIH TLY	ACGIH OEL	NIOSHT REL	ILAIHG	ILA ROEG	IL A Internal
			STEE	JUA.			EXPOSUTE
	经外处的实现的	がは自己の自己にはな				Control (Control	SONOTO 14.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Oil mist, mineral	TWA: 5	TWA: 5		TWA 5 mg/m ³			
·	mg/m³	mg/m³		ST 10 mg/m ³			

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 protective gloves/clothing. Choose the appropriate protective clothing / gloves based on the tasks 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. Remove and wash contaminated clothing before

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Clear

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Physical State Liquid Odor Mild

Odor Threshold No information available

Not applicable pН Not applicable Melting point / melting range

No information available Boiling point / boiling range

244 °C / 471 °F COC ASTM D92 Flash Point

No information available **Evaporation Rate** Flammability Limit in Air No information available No information available **Explosion Limits** No information available Vapor Pressure Vapor Density (Air) No information available 0.86 g/cm3 @15°C Density

Solubility No information available Partition Coefficient (n-octanol/water) No information available No information available **Autoignition Temperature**

No information available **Decomposing Temperature**

@ 40C = 49.00 cSt; @ 100C = 7.83 cSt Viscosity

Other Information

Less than 3.0 wt% (mineral oil component only) **DMSO** extract by IP346

10 STABILITY AND REACTIVITY

10.1 Reactivity

The product is chemically stable Reactivity

10.2 Chemical stability

Stable under recommended storage conditions. **Chemical Stability**

10.3 Possibility of Hazardous Reactions

None under normal processing. Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerisation does not occur.

10.4 Conditions to Avoid

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

10.5 Incompatible Materials

Strong oxidizing agents. **Incompatible Materials**

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and Hazardous decomposition products

vapors.

(1-TOXICOLOGICAL INFORMATION

11.1 Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.

May cause slight irritation. Eye contact

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Skin Contact

May be harmful in contact with skin.

Ingestion

May be harmful if swallowed.

Г	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

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

Not classified.

irritation

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 and Health Administration of the US Department of Labor)

Reproductive Effects

Contains a known or suspected reproductive toxin.

STOT - single exposure

Not classified.

STOT - repeated exposure

Not classified

Aspiration hazard

Not classified.

11.5 Acute Toxicity

Unknown acute toxicity

1.95% 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):

ATEmix (oral)

> 5,000 mg/kg

ATEmix (dermal)

> 2,000 mg/kg

ATEmix (inhalation-dust/mist)

> 5 mg/l

12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity **Ecotoxicity effects**

Harmful to aquatic life with long lasting effects. 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

1.96% 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.

TSCA	All ingredients are on the inventory or exempt from listing	
DSL	All ingredients are on the inventory or exempt from listing	
NDSL	Not Listed	
EINECS	Does not comply	
ELINCS	Not Listed	
ENCS	Does not comply	
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 All ingredients are on the inventory or exempt from listing		
NZIoC	Does not comply	
Mexico (INSQ)	Does not comply	

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.

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

State Right-to-Know

eChemical Name	WE CAS NO SEE SOME	Mew Jersey
Petroleum distillates, hydrotreated heavy	64742-54-7	X
paraffinic		

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 (Hydraulic Oil)

Canada

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

Chemical Name: NPRI CAS No. Neight // Neight // NPRI				
2,6-di-tert-butyl p-cresol	128-37-0	<1	Listed	
distillates (petroleum), hydrotreated light	64742-47-8	<0.1	Listed	
Diphenylamine	122-39-4	<0.001	Listed	

Legend

NPRI - National Pollutant Release Inventory

15 OTHER INFORMATION

NFPA_

Health: 1

Flammability: 1

Instability 0

Prepared By Revision Date: Robin Hutchens 10-Apr-2015

Revision Summary:

Reproductive toxic Cat. 2 (Repr. Cat. 2)

SARA 311/312 Hazard change

GHS SDS format Hazard Statements

<u>Disclaimer:</u>
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