



HOUGHTON

SAFETY DATA SHEET

Revision Date: 09-07-2015

Version 2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s): 06520000-M
Product Name HYDRO-DRIVE HP-200

Recommended use Hydraulic Fluid
Uses advised against Any other purpose.

Manufacturer, Importer, Supplier

Houghton International Inc.
Madison & Van Buren Aves.
Valley Forge, PA 19482
Telephone: 610-666-4000 FAX: 610-666-1376
Website: www.houghtonintl.com
Customer Service: 888-459-9844

Houghton Canada
915 Meyerside Drive
Mississauga
ON LST 1R8

Emergency telephone number

3E Company 1-866-519-4752 (USA, Canada, Mexico)
Company Access Code: 333938

SECTION 2: HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not classified

GHS Label elements, including precautionary statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Precautionary Statements

Precautionary Statements - Response
Not applicable

Hazards not otherwise classified (HNOC)
Not applicable

Other information
Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture. Health hazard information is based on its ingredients.

Chemical Name	CAS-No	Weight %
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	60% - 100%
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	-	10% - 25%

Additional information

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. See Section 15 for additional information on base oils.

SECTION 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General advice	If symptoms persist, call a physician.
Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Protection of First-aiders	Use personal protective equipment.

4.2. Most important symptoms and effects, both acute and delayed

Main Symptoms None

4.3. Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment., Use CO2, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

Extinguishing media which shall not be used for safety reasons

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

5.2. Special hazards arising from the substance or mixture

Special Hazard

In the event of fire and/or explosion do not breathe fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). This material creates a fire hazard because it floats on water. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Decomposition Products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Ensure adequate ventilation.

Advice for non-emergency personnel Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

6.4. Reference to other sections

See Section 8/12/13 for additional information

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Recommended Shelf Life

No information available.

Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

7.3. Specific end uses

Specific use(s) Hydraulic Fluid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA WEEL
---------------	-----------	----------	------------	-----------

Highly refined base oil (Viscosity >20.5 cSt @40°C) -	5 mg/m ³ as mist	5 mg/m ³ as mist		
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) -	5 mg/m ³ as mist	5 mg/m ³ as mist		

Hydrocarbon solvent vapor mixtures which do not have substance specific occupational exposure limits may be evaluated by the Reciprocal Calculation Procedure (RCP) which assigns a recommended occupational exposure limit based on the mass composition and hydrocarbon group guidance values (GGVs). Applicable recommended occupational exposure limits are shown in the table below.

Chemical Name	RCP OEL	Manufacturer
Distillates (petroleum), hydrotreated middle 64742-46-7	RCP: TWA 1200 mg/m ³ 143ppm	

Exposure controls

Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state @20°C	liquid	Appearance	clear , amber
Odor	No information available	Odor Threshold	Not Applicable

<u>Property</u>	<u>Values</u>	<u>Note</u>
pH	No information available	
Melting Point / Freezing Point	No information available	
Boiling point/boiling range	> 204 °C / > 399 °F	
Flash point	230 °C / 446 °F	
Evaporation rate	< 1	Open cup (BuAc = 1)
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	0.86	@15.5°C
Solubility(ies)	Insoluble in water	
Partition coefficient: n-octanol/water	Not Applicable	
Autoignition temperature	No information available	

Decomposition temperature	No information available
Viscosity, kinematic	~ 46.0 cSt @ 40 °C
Explosive properties	Not Applicable
Oxidizing Properties	Not Applicable

9.2 Other information

Viscosity, kinematic (100°C)	No information available
Pour point	No information available
VOC Content (ASTM E-1868-10)	No information available
VOC Content	No information available

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

None under normal use conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None under normal use conditions

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5. Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Inhalation	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Component Information

Chemical Name	LD50 Oral (Rat)	LD50 Dermal (Rat/Rabbit)	LC50 Inhalation
Highly refined base oil (Viscosity >20.5 cSt @40°C) -	>2000 mg/kg	>2000 mg/kg	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) -	>2000 mg/kg	>2000 mg/kg	

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization None known.

Germ Cell Mutagenicity None known.

Carcinogenicity None known.

Reproductive toxicity None known.

Specific target organ systemic toxicity (single exposure) None known.

Specific target organ systemic toxicity (repeated exposure) None known.

Aspiration hazard None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No special environmental measures are necessary

Persistence and degradability

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

Bioaccumulation

No information available.

Mobility

The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility.

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging Observe all label precautions until container is cleaned, reconditioned or destroyed.

SECTION 14: TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

SECTION 15: REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
AICS	Does not Comply
PICCS	Complies
KECL	Complies
IECSC	Complies
ENCS	Does not Comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

ENCS - Japan Existing and New Chemical Substances

U.S. 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 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

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).

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.

U.S. State Regulations

SCAQMD Rule 1144

This product has not been tested for VOC content by the ASTM E-1868-10 method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid or as a direct-contact lubricant.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

International Regulations

Mexico - Grade Slight risk, Grade 1

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and

the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

Other information

Not applicable

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical Name	CAS-No
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated	101316-72-7
Lubricating oils (petroleum), used, noncatalytically refined	101316-73-8
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4
Residual oils (petroleum), solvent-refined	64742-01-4
Extracts (petroleum), residual oil solvent	64742-10-5
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Residual oils (petroleum), hydrotreated	64742-57-0
Lubricating oils (petroleum), hydrotreated spent	64742-58-1
Residual oils (petroleum), solvent-dewaxed	64742-62-7
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1
Lubricating oils	74869-22-0
Paraffin oils	8012-95-1
White mineral oil (petroleum)	8042-47-5

The highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical Name	CAS-No
Distillates (petroleum), straight-run middle	64741-44-2
Distillates (petroleum), heavy hydrocracked	64741-76-0
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5
Distillates (petroleum), hydrotreated middle	64742-46-7
Distillates (petroleum), hydrotreated middle	64742-46-7
Distillates (petroleum), hydrotreated light	64742-47-8
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates, petroleum, solvent-dewaxed light paraffinic	64742-56-9
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1
White mineral oil (petroleum)	8042-47-5
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE

SECTION 16: OTHER INFORMATION

NFPA

Health Hazard 0

Flammability 1

Instability 0

Physical and chemical hazards -

Key or legend to abbreviations and acronyms used in the safety data sheet

STOT SE - Specific target organ systemic toxicity (Single exposure)

STOT RE - Specific target organ systemic toxicity (repeated exposure)
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
VOC - Volatile organic compounds

Revision Date: 09-07-2015

Revision Note

No information available

Disclaimer

The information provided in this 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.

end