MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR:

PRODUCT:

QUAKER HOUGHTON HYDROLUBRIC NO. 2

DATE:

(MSDS date)

21.09.2019

1. Manufacturer/Supplier:

PPS Industries Limited

86 Hugo Johnston Drive, Auckland

New Zealand

P.O.Box 12823, Penrose, Auckland 1642

Phone: 64 9 579-1001 Facsimile: 64 9 579-9497

Emergency Phone: 0800 657-894 Website: www.ppsindustries.co.nz

Emergency Information:

National Poison Centre

0800 764-766

Chemcall 24/7 Emergency Response Service :

0800 243-622

13. Disposal Considerations:

Product

Recommendation - Consult local or national regulations to ensure proper disposal.

Packaging

Disposal must be made according to official regulations.

16. Other Information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



SAFETY DATA SHEET

Revision Date 09-21-2019

Version 4

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) Product Name 05056012-M

HYDROLUBRIC NO. 2

Other means of identification

UN Number

Not available

Recommended use of the chemical and restrictions on use

Recommended Use Uses advised against Fire-resistant hydraulic fluid

Any other purpose.

Suppliers name, address and phone number

Manufacturer, Importer, Supplier

Houghton Australia Pty. Ltd. 287 Wickham Road Moorabbin, Victoria Australia, 3189 +61 1300 736 642

Emergency telephone number

For further information, please contact: ProductStewardship@houghtonintl.com

Emergency Telephone

3E Company (+)1 760 476 3960 (Code 333938)

Australia: (+)61 1 800 686 951 Australia (+)61 280 363 166 New Zealand: (+)64 800 451719

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)

Label elements

Exclamation mark



Signal word WARNING

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/eye protection/face protection

Eves

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

Skin

IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

Other hazards

Harmful to aquatic life with long lasting effects Toxic to aquatic life

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)	-	50% - 100%
Sulfonic acids, petroleum, sodium salts	68608-26-4	2.5% - 10%
Potassium hydroxide	1310-58-3	0% - 1%

The remaining composition is a mixture of non-classified ingredients or additives below the threshold for disclosure

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

Description of first aid measures

General advice

Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt

seek medical advice.

Inhalation

Remove to fresh air.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing before re-use. If symptoms persist, call a physician.

Eye contact

Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not

rub affected area. Call a physician if irritation persists.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting

without medical advice.

Protection of First-aiders

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Most important symptoms and effects, both acute and delayed

Symptoms

Redness. Rash. Itching. Eye damage/irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

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

Specific hazards arising from the chemical

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke) Water runoff can cause environmental damage

Hazardous decomposition products

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

Special protective equipment and precautions for fire fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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

Pick up and transfer to properly labeled containers.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. 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.

Conditions for safe storage, including any incompatibilities

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

Shelf life 12 months

Incompatible materials

None known based on information supplied.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
Highly refined base oil (Viscosity >20.5 cSt		TWA: 5 mg/m ³	
@40°C)		STEL: 10 mg/m³	
Potassium hydroxide	Ceiling: 2 mg/m³	Ceiling: 2 mg/m ³	1

Chemical name	RCP OF	Manufacturer
AND THE PROPERTY OF THE PARTY O	Service and the service of the servi	Constitution of the section of the s
Distillates (petroleum), hydrotreated middle	RCP: TWA 1200 mg/m3 143ppm	
Distincted (post of the post o	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
64/42-46-/		

Appropriate engineering controls

Engineering controls

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

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls

No information available.

Hygiene measures

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Regular

cleaning of equipment, work area and clothing is recommended.

Thermal hazards

None under normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

liquid

Appearance

clear amber Not Determined

Odor

Not Determined

Odor threshold

Property

<u>Values</u> 9.2

Remarks @5%

Melting point / freezing point

Not Determined

Not Determined Boiling point / boiling range

g/cm3 @15°C

05056012-M - HYDROLUBRIC NO. 2

Flash point

> 150 °C / > 302 °F

Evaporation rate

Not Determined Not Determined

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit: Lower flammability limit:

Not Determined Not Determined

Vapor pressure Vapor density Not Determined Not Determined

Relative density

0.88

Solubility(les)
Partition coefficient
Autoignition temperature
Decomposition temperature

emulsifiable
Not Determined
Not Determined
Not Determined
Not Determined

Kinematic viscosity Explosive properties Oxidizing Properties

Not applicable Not applicable

Other Information

Viscosity, kinematic (100°C)

Not Determined Not Determined

Pour Point VOC Content (ASTM E-1868-10)

Not Determined

VOC content

Not Determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

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

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information - Principle Routes of Exposure

Inhalation

Based on available data, the classification criteria are not met.

Eye contact

Irritating to eyes.

Skin contact

Irritating to skin.

Ingestion

Based on available data, the classification criteria are not met

Symptoms

Moderate skin irritation. Moderately irritating to the eyes.

Numerical measures of toxicity - Product Information

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known information

Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined base oil (Viscosity	>2000 mg/kg	>2000 mg/kg	
>20.5 cSt @40°C)			
Sulfonic acids, petroleum, sodium	>5000 mg/kg (Rat)	>500 mg/kg(Rabbit)	
salts			
Potassium hydroxide	333 mg/kg (Rat)		

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

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

Specific target organ systemic toxicity (single exposure)

Based on available data, the classification criteria are not met.

Specific target organ systemic toxicity (repeated exposure)

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Exposure levels

See section 8 for more information

Interactive effects

None known

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants		Crustacea
Sulfonic acids, petroleum, sodium		>1000: 96 h Pimephales promelas	>1000: 48 h Daphnia magna mg/L

salts	mg/L LC50	EC50
Potassium hydroxide	80: 96 h Gambusia affinis mg/L LC50 static	270: 24 h Daphnia magna mg/L EC50
	165: 24 h Poecilia reticulata mg/L LC50	

Persistence and degradability

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

Bioaccumulative potential

Chemical name	Partition coefficient
Sulfonic acids, petroleum, sodium salts	18.05
Potassium hydroxide	0.83

Mobility

No information available

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Safe handling and disposal methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Disposal of any contaminated packaging

Do not reuse empty containers.

Environmental regulations

No information available

SECTION 14: TRANSPORT INFORMATION

<u>ADG</u>

Not Regulated

IMDG

Not Regulated

<u>IATA</u>

Not Regulated

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

<u>Australia</u>

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

New Zealand

HSNO Hazard Classification:

6.3A - Substances that are irritating to the skin

6.4A - Substances that are irritating to the eye

9.1C - Substances that are harmful in the aquatic environment

HSNO Approval Number:

HSNO Approval Number: HSR002606

HSNO Group Standard: Lubricants (Subsidiary hazard) GROUP STANDARD 2017.

International Inventories

Inventory information may be utilizing alternative CAS#s or exemptions beyond those stated within this document For further information, please contact: ProductStewardship@houghtonintl.com

TSCA	Complies
DSL	Complies
AICS	Complies
PICCS	Complies
KECL	Complies
IECSC	Complies
ENCS	Complies
TCSI	Complies
NZIoC	Complies

Legend:

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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
TCSI - Taiwan National Existing Chemical Inventory

NZIoC - New Zealand Inventory of Chemicals

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Chemicals Subject to Prior Informed Consent (PIC) Not applicable

Other Information

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,	101316-72-7
hydrogenated	
Lubricating oils (petroleum), used, noncatalytically refined	101316-73-8
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5
Residual cils (petroleum), solvent deasphalted	64741-95-3
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4

Distillates (petroleum), solvent-refined light naphthenic	64741-97-5
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),hydrotreatedheavyparaffinic	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9
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
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based,	72623-85-9
high-viscosity	70000 00 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
Lubricating oils	74869-22-0
Paraffin oils	8012-95-1
White mineral oil (petroleum)	8042-47-5
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9

Chemical name	CAS No
Distillates (petroleum), straight-run middle	64741-44-2
Distillates (petroleum), heavy hydrocracked	64741-76-0
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5
Residual oils (petroleum), solvent deasphalted	64741-95-3
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4
Residual oils (petroleum), solvent-refined	64742-01-4
Distillates (petroleum), hydrotreated middle	64742-46-7
Distillates (petroleum), hydrotreated middle	64742-46-7
Distillates (petroleum), hydrotreated light	64742-47-8
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5
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), hydrotreated light paraffinic	64742-55-8
Distillates, petroleum, solvent-dewaxed light paraffinic	64742-56-9
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9
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 light	647 4 2-71-8
Dec-1-ene, homopolymer, hydrogenated	68037-01-4
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7
Lubricating olls (petroleum), C20-50, hydrotreated neutral oil-based,	72623-85-9
high-viscosity	
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
White mineral oil (petroleum)	8042-47-5
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE

SECTION 16: OTHER INFORMATION

Revision Date Revision Note 09-21-2019

This SDS has been revised in the following section(s), Company Logo.

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

TWA

Time weighted average

STEL

Short term exposure limit

Ceiling

Maximum limit value:

(s) - Skin

Skin designation Carcinogen

+ Sensitizers C
STOT SE - Specific target organ systemic toxicity (Single exposure)
STOT RE - Specific target organ systemic toxicity (repeated exposure)

VOC - Volatile organic compounds

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 of Safety Data Sheet