

MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT :

QUAKER HOUGHTON SEF 4

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.

Revision Date 09-21-2019

Version 4

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) 41650114-M
Product Name SEF 4

Other means of identification

UN Number Not available

Recommended use of the chemical and restrictions on use

Recommended Use Metalworking fluid
Uses advised against 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

Aspiration toxicity	Category 1 - (H304)
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Label elements

Health hazards



Signal word
DANGER

Hazard statements
H304 - May be fatal if swallowed and enters airways
AUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - Response

Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	-	50% - 100%

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 Immediate medical attention is required. Do not get in eyes, on skin, or on clothing.

Inhalation Move to fresh air. Potential for aspiration if swallowed. Get medical attention immediately if symptoms occur.

Skin contact Wash off immediately with plenty of water.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

Ingestion Do not induce vomiting without medical advice. Clean mouth with water and afterwards drink plenty of water. Aspiration hazard if swallowed - can enter lungs and cause damage. If symptoms persist, call a physician.

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 May be fatal if swallowed and enters airways.

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) This material creates a fire hazard because it floats on water

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

See Section 12 for additional Ecological Information.

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

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

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, low viscosity base oil (Viscosity <7 cSt @40°C)		TWA: 5 mg/m ³ STEL: 10 mg/m ³	

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	
Distillates (petroleum), hydrotreated light 64742-47-8	RCP: TWA 1200 mg/m ³ 182ppm	
Naphtha (petroleum), hydrotreated heavy 64742-48-9	RCP: TWA 1000 mg/m ³	
C12-C14 isoalkanes 68551-19-9	RCP: TWA 1200 mg/m ³	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 600 mg/m ³	
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 150ppm TWA: 1200 mg/m ³	
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics NOT AVAILABLE	TWA: 171 ppm TWA: 1200 mg/m ³	
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m ³	
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 165 ppm TWA: 1200 mg/m ³	
Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 1200 mg/m ³ 182ppm	
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	CEFIC-HSPA: 1200 mg/m ³

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	Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.
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 colorless
Odor	Mild mineral oil	Odor threshold	Not Determined

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH	Not applicable	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	> 260 °C / > 500 °F	
Flash point	> 121 °C / > 250 °F	PMCC
Evaporation rate	< 1	(BuAc = 1)
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	
Vapor density	Not Determined	
Relative density	~ 0.83	g/cm3 @15°C
Solubility(ies)	Insoluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	~ 4.4 cSt @ 40 °C	ASTM D 445
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

Other Information

Viscosity, kinematic (100°C)	Not Determined	
Pour Point	Not Determined	
VOC Content (ASTM E-1868-10)	Not Determined	
VOC content	0.205 lbs/gal	MOD. EPA METHOD 24

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	Risk of serious damage to the lungs (by aspiration).
Eye contact	Based on available data, the classification criteria are not met.
Skin contact	Based on available data, the classification criteria are not met.
Ingestion	Risk of product entering the lungs on vomiting after ingestion.
Symptoms	May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Acute toxicity - Product Information

May be harmful if swallowed and enters airways

Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	

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

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
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	Based on available data, the classification criteria are not met.

toxicity (repeated exposure)

Aspiration hazard	Risk of serious damage to the lungs (by aspiration).
Exposure levels	See section 8 for more information
Interactive effects	None known

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

Not considered to be harmful to aquatic life.

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

No information available

Mobility

The product is insoluble and floats on water

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
<u>IMDG</u>	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**Australia**

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:**

6.1E - Substances that are acutely toxic

HSNO Approval Number:

HSNO Approval Number: HSR002614

HSNO Group Standard: Metal Industry Products (Toxic [6.1]) 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/NDL - 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, low viscosity base oil (Viscosity <7 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No
Distillates (petroleum), hydrotreated middle	64742-46-7
Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics	64742-46-7
Distillates (petroleum), hydrotreated light	64742-47-8
Naphtha (petroleum), hydrotreated heavy	64742-48-9
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9
C12-C14 isoalkanes	68551-19-9
White mineral oil (petroleum)	8042-47-5
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9
Alkanes, C14-16	90622-46-1
Alkanes, C12-26-branched and linear	90622-53-0
Alkanes, C11-15-iso-	90622-58-5
Alkanes, C16-20-iso-	90622-59-6
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	NOT AVAILABLE
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C14, n-alkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C18, n-alkanes, cyclics, aromatics (2-30%)	NOT AVAILABLE
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C16, isoalkanes, cyclics, < 2% aromatics	NOT AVAILABLE
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics	NOT AVAILABLE

SECTION 16: OTHER INFORMATION

Revision Date 09-21-2019
Revision Note 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
+	Sensitizers	C	Carcinogen

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