MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR:

PRODUCT:

QUAKER HOUGHTON CINDOL 4641-AU

DATE:

(MSDS date)

20.04.2020

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 04-20-2020

Version 1

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) Product Name 73004641-M CINDOL 4641-AU

Other means of identification

UN Number

Not available

Recommended use of the chemical and restrictions on use

Recommended Use Uses advised against Metal forming lubricant 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

Distributor

Tyreline Distributors Limited 87 Kahikatea Drive, Melville Hamilton, New Zealand 3206 Phone: +64 7 843 3552 Fax: +64 7 843 7389

E-mail: LubeSales@tyreline.co.nz

PPS Industries Limited

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New Zealand

P.O.Box 12823, Penrose, Auckland 1642

Phone: +64 9 579-1001 Facsimile: +64 9 579-9497 Website: www.ppsindustries.co.nz ELITE SURFACE TECHNOLOGIES NZ LTD

60 The Concourse PO Box 21- 020

Henderson, Waitakere 6050

Auckland New Zealand Phone: +64 9 8374 438

Fax: +64 9 837 4410

Mobile: +64 274 874 023

E-mail: ayozin@elitesurtech.co.nz

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)

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

Label elements

Exclamation mark Health hazards





Signal word DANGER

Hazard statements

H304 - May be fatal if swallowed and enters airways

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

Eyes

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

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

New Zealand

HSNO Hazard Classification:

6.1E - Substances that are acutely toxic

6.3A - Substances that are irritating to the skin

6.4A - Substances that are irritating to the eye

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No	Weight-%
Hexadec-1-ene	629-73-2	25% - 50%
2-Butenedioic acid (2Z)-, 1,4-didodecyl ester	2915-52-8	10% - 25%
Octadec-1-ene	112-88-9	10% - 25%
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	<u> </u>	10% - 25%
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	2.5% - 10%

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 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. Seek immediate medical attention/advice.

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. 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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons

None

Specific hazards arising from the chemical

This material creates a fire hazard because it floats on water

Hazardous decomposition products

None under normal use

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

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.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

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	化有效 人名英格兰 化二氯甲基苯甲基磺胺 电电影 经工程 化电影 医电影 医电影 化二氯甲基苯甲基甲基	New Zealand	New Zealand - Biological Exposure Indices (BEI)
Highly refined, low viscosity base oil		TWA: 5 mg/m ³	
(Viscosity <7 cSt @40°C)		STEL: 10 mg/m³	
Highly refined base oil (Viscosity >20.5 cSt		TWA: 5 mg/m ³	
@40°C)	<u> </u>	STEL: 10 mg/m³	

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
Distiliates (petroleum), hydrotreated middle 64742-46-7	RCP: TWA 1200 mg/m ³ 143ppm	
Distillates (petroleum), hydrotreated light 64742-47-8	RCP: TWA 1200 mg/m3 182ppm	,
Naphtha (petroleum), hydrotreated heavy 64742-48-9	RCP: TWA 1000 mg/m³	
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/m³	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics,	TWA: 600 mg/m ³	

<2% aromatics NOT AVAILABLE		
Hydrocarbons, C13-C16, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP C9-C15 aliphatics: 600mg/m³	
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	TWA: 150ppm TWA: 1200 mg/m³	
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/m³	
Hydrocarbons, C12-C16, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 1200 mg/m³ 182ppm	
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ^s	
Hydrocarbons, C14-C18, n-aikanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/ms	
Hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics NOT AVAILABLE	RCP: TWA 1200 mg/m³ 182ppm	CEFIC-HSPA: 1200 mg/m³
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics NOT AVAILABLE	RCP: TWA 600 mg/m ³	CEFIC-HSPA: 1200 mg/m³

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.

Thermal hazards

None under normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

liquid

Not Determined

Appearance Odor threshold clear yellow Not Determined

Property

Odor

<u>Values</u>

Remarks

pH Melting point / freezing point Boiling point / boiling range Not Determined Not Determined Not Determined Flash point

Evaporation rate

Flammability (solid, gas)

> 150 °C / > 302 °F Not Determined Cleveland Open Cup

Flammability Limit in Air

Upper flammability limit: Lower flammability limit: Not Determined Not Determined

Not Determined

Vapor pressure Vapor density

Relative density
Solubility(ies)
Partition coefficient

Autoignition temperature Decomposition temperature Kinematic viscosity Explosive properties Oxidizing Properties Not Determined Not Determined

~ 0.835 Insoluble in water

Not Determined Not Determined Not Determined > 5 cSt @ 40 °C Not applicable

Not applicable

g/cm3 @20°C

ASTM D 445

Other Information

Viscosity, kinematic (100°C)

Pour Point

VOC Content (ASTM E-1868-10)
VOC content

Not Determined Not Determined Not Determined

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

None known based on information supplied.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

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).

Revision Date 04-20-2020

Eye contact

Irritating to eyes.

Skin contact

Irritating to skin.

Ingestion

Risk of product entering the lungs on vomiting after ingestion.

Symptoms

May be fatal if swallowed and enters airways. Moderate skin irritation. Moderately irritating

to the eyes.

Numerical measures of toxicity - Product Information

Acute toxicity - Product Information

May be fatal if swallowed and enters airways

Acute toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hexadec-1-ene	10000 mg/kg (Rat)	> 10000 mg/kg(Rabbit)	
Octadec-1-ene	> 10000 mg/kg (Rat)	> 10000 mg/kg(Rabbit)	
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
Highly refined base oil (Viscosity >20.5 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

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

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

No special environmental measures are necessary.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Hexadec-1-ene	>1000: 72 h Selenastrum	>1000: 96 h Oncorhynchus mykiss	>1000: 48 h Daphnia magna mg/L
	capricornutum mg/L EC50	mg/L LC50	EC50
Octadec-1-ene	1000: 72 h Desmodesmus	1000: 96 h Oncorhynchus mykiss	1000: 48 h Daphnia magna mg/L
	subspicatus mg/L EC50	ma/L LC50	EC50

Persistence and degradability

No information available

Bioaccumulative potential

Chemical name	Partition coefficient
Octadec-1-ene	8

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

SE																	

<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

<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:

6.1E - Substances that are acutely toxic

6.3A - Substances that are irritating to the skin

6.4A - Substances that are irritating to the eye

HSNO Group Standard: None.

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	All Components are NOT on the Chemical Inventory
AICS	Complies
PICCS	Does not Comply
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 oils (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	
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

The highly refined, low viscosity base oil (Viscosity <7 cSt $@40^{\circ}$ 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%	64742-46-7
aromatics	
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%	NOT AVAILABLE
aromatics	
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C15, n-aikanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE
Hydrocarbons, C13-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics	NOT AVAILABLE
Hydrocarbons, C14-C17, n-alkanes, <2% aromatics	NOT AVAILABLE

SECTION 16: OTHER INFORMATION

Revision Date Revision Note 04-20-2020 Not applicable.

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

TWA

Time weighted average

STEL (s) - Skin Short term exposure limit

Ceiling

Maximum limit value:

C

Skin designation Carcinogen

STOT SE Specific target organ syste

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