MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT : QUAKER HOUGHTON CERFA-KLEEN 5397

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** 3

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) 53005397-M
Product Name CERFA-KLEEN 5397

Other means of identification

UN Number Not available

Recommended use of the chemical and restrictions on use

Recommended Use Detergent
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

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)

Label elements

Corrosion

Signal word
DANGER

Hazard statements
H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/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
Immediately call a POISON CENTER or doctor/physician
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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No	Weight-%
Neutralised 3,5,5-trimethylhexanoic acid	3302-10-1*	2.5% - 10%
Neutralised 1-Aminopropan-2-ol	78-96-6*	2.5% - 10%
2-(Hydroxymethylamino)ethanol	34375-28-5	2.5% - 10%
2,2',2"-Nitrilotriethanol	102-71-6	2.5% - 10%
1-Aminopropan-2-ol	78-96-6	2.5% - 10%
Neutralised 2-Aminoethanol	141-43-5*	1% - 2.5%
2-Aminoethanol	141-43-5	1% - 2.5%
Tetrasodium ethylenediamine tetraacetate	64-02-8	1% - 2.5%
(R)-p-mentha-1,8-diene	5989-27-5	0% - 1%

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

SECTION 4: FIRST AID MEASURES

Description of first aid measures

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

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. Seek immediate medical attention/advice.

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 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

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.

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	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
2,2',2''-Nitrilotriethanol	TWA: 5 mg/m³ (+)	TWA: 5 mg/m³	
2-Aminoethanol	TWA: 3 ppm TWA: 7.5 mg/m³ STEL: 6 ppm STEL: 15 mg/m³	TWA: 3 ppm TWA: 7.5 mg/m³ STEL: 6 ppm STEL: 15 mg/m³	

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tightly fitting safety goggles. If splashes are likely to occur, wear:. Face-shield.

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	**Appearance**	clear yellow
Odor	Not Determined	**Odor threshold**	Not Determined

Property	Values	Remarks
pH	~ 9.8	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point		
Evaporation rate	Not Determined	
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	1.06	g/cm3 @15.5°C
Solubility(ies)	Not Determined	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	Not Applicable Not Determined	
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	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

Carbon oxides. Nitrogen oxides (NOx).

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	May result in permanent damage including blindness.
Skin contact	Irritating to skin.
Ingestion	Based on available data, the classification criteria are not met

Symptoms Moderate skin irritation. Corrosive - causes irreversible eye damage.

Numerical measures of toxicity - Product Information

ATEmix (oral)	5,336.00 mg/kg
ATEmix (dermal)	12,516.00 mg/kg
ATEmix (inhalation-dust/mist)	15.80 mg/l

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
Neutralised 3,5,5-trimethylhexanoic acid	1100 mg/kg (Rat)	> 2000 mg/kg (Rat)	
Neutralised 1-Aminopropan-2-ol	2098 mg/kg (Rat)	1851 mg/kg (Rabbit)	
2-(Hydroxymethylamino)ethanol	1620 mg/kg (Rat)	>5000 mg/kg (Rabbit)	
2,2',2"-Nitrilotriethanol		> 16 mL/kg (Rat) > 2000 mg/kg (Rabbit)	
1-Aminopropan-2-ol	2098 mg/kg (Rat)	1851 mg/kg (Rabbit)	
Neutralised 2-Aminoethanol	1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	
2-Aminoethanol	1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	
Tetrasodium ethylenediamine tetraacetate	> 1780 mg/kg (Rat)		4.14 mg/l (4h)(Rat)
(R)-p-mentha-1,8-diene	= 4400 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	

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 Causes severe eye damage.

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

Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Neutralised 3,5,5-trimethylhexanoic acid	81: 72 h Pseudokirchneriella subcapitata mg/L EC50	122: 96 h Oncorhynchus mykiss mg/L LC50 190: 96 h Lepomis gibbosus mg/L LC50	68: 48 h Daphnia magna mg/L EC50
Neutralised 1-Aminopropan-2-ol	32.7: 72 h Scenedesmus subspicatus mg/L EC50	2520: 96 h Pimephales promelas mg/L LC50 210: 96 h Carassius auratus mg/L LC50 215 - 464: 96 h Leuciscus idus mg/L LC50	108.82: 48 h Daphnia magna mg/L EC50
2-(Hydroxymethylamino)ethanol		>100: 96 h Oncorhynchus mykiss mg/L LC50	27.9: 48 h Daphnia magna mg/L EC50
2,2',2''-Nitrilotriethanol	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600-13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450-1000: 96 h Lepomis macrochirus mg/L LC50 static	1386: 24 h Daphnia magna mg/L EC50
1-Aminopropan-2-ol	32.7: 72 h Scenedesmus subspicatus mg/L EC50	2520: 96 h Pimephales promelas mg/L LC50 210: 96 h Carassius auratus mg/L LC50 215 - 464: 96 h Leuciscus idus mg/L LC50	108.82: 48 h Daphnia magna mg/L EC50
Neutralised 2-Aminoethanol	2.8: 72 h Pseudokirchneriella subcapitata mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	65: 48 h Daphnia magna mg/L EC50
2-Aminoethanol	2.8: 72 h Pseudokirchneriella subcapitata mg/L EC50	227: 96 h Pimephales promelas mg/L LC50 flow-through 3684: 96 h Brachydanio rerio mg/L LC50 static 300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	65: 48 h Daphnia magna mg/L EC50
Tetrasodium ethylenediamine tetraacetate	2.77: 72 h Desmodesmus subspicatus mg/L EC50	121: 96 h Lepomis macrochirus mg/L LC50	140: 48 h Daphnia magna mg/L EC50
(R)-p-mentha-1,8-diene	150: 72 h Desmodesmus subspicatus mg/L EC50	0.688: 96 h Pimephales promelas mg/L LC50	0.36: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available

Bioaccumulative potential

Chemical name	Partition coefficient
Neutralised 3,5,5-trimethylhexanoic acid	3.08
Neutralised 1-Aminopropan-2-ol	-0.94
2,2',2''-Nitrilotriethanol	-2.53

1-Aminopropan-2-ol	-0.94
Neutralised 2-Aminoethanol	-1.91
2-Aminoethanol	-1.91

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

ADG Not Regulated

IMDG Not Regulated

IATA 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:
6.3A - Substances that are irritating to the skin
8.3A - Substances that are corrosive to ocular tissue
9.1D - Substances that are slightly harmful in the aquatic environment or are otherwise designated for biocidal action

HSNO Approval Number:

HSNO Approval Number: HSR002530

HSNO Group Standard: Cleaning Products (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	Does not Comply
KECL	Does not Comply
IECSC	Complies
ENCS	Does not Comply
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
Not applicable

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