SAFETY DATA SHEET

Revision Date 09-21-2019 **Version** 3

SECTION 1: IDENTIFICATION

Product identifier

Product Code(s) 42425400-M
Product Name HOUGHTO GRIND 4253 B

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

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Hazard statements
None

Other hazards
May be harmful if swallowed

Causes mild skin irritation

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical name	CAS No	Weight-%
2,2'-Oxydiethanol	111-46-6	2.5% - 10%
Neutralised Benzotriazole	95-14-7*	2.5% - 10%
2-Butoxyethanol	111-76-2	2.5% - 10%
Neutralised Propylidynetrimethanol, propoxylated, reaction products with ammonia	39423-51-3*	2.5% - 10%
Neutralised Potassium Hydroxide	1310-58-3*	1% - 2.5%

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air.

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 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.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

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
Carbon oxides: Carbon monoxide (CO), carbon dioxide (CO2)

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.

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

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in original container or corrosive resistant and/or lined container.

Recommended Shelf Life
Shelf life 12 months

Incompatible materials
Strong acids. Strong bases. Strong oxidizing agents. Aluminium.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	Australia	New Zealand	New Zealand - Biological Exposure Indices (BEI)
2,2'-Oxydiethanol	TWA: 23 ppm TWA: 100 mg/m^3	TWA: 23 ppm TWA: 101 mg/m^3	
2-Butoxyethanol	TWA: 20 ppm TWA: 96.9 mg/m^3 STEL: 50 ppm STEL: 242 mg/m^3 (s)	TWA: 25 ppm TWA: 121 mg/m^3 (s)	

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 breathing vapors, mist or gas. 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	Characteristic	**Odor threshold**	Not Determined

Property	Values	Remarks
pH	= 9.2	No information available
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point	100 °C / 212 °F	Open cup
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	= 1.07	g/cm3 @15.5°C
Solubility(ies)	Soluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	20 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	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

Strong acids. Strong bases. Strong oxidizing agents. Aluminium.

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

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 Based on available data, the classification criteria are not met

Symptoms No information available.

Numerical measures of toxicity - Product Information

ATEmix (oral) 2,612.00 mg/kg
ATEmix (dermal) 11,789.00 mg/kg
ATEmix (inhalation-vapor) 245.00 mg/l
ATEmix (inhalation-dust/mist) 17.20 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
2,2'-Oxydiethanol	12565 mg/kg (Rat)	= 11890 mg/kg (Rabbit)	
Neutralised Benzotriazole	560 mg/kg (Rat)	1000 mg/kg (Rabbit)	
2-Butoxyethanol	560 mg/kg (Rat)	= 220 mg/kg (Rabbit) = 2270 mg/kg (Rat)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Neutralised Propylidynetrimethanol, propoxylated, reaction products with ammonia	550 mg/kg (Rat)	>1000 mg/kg (Rat)	
Neutralised Potassium Hydroxide	333 mg/kg (Rat)		

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 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

Not considered to be harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
2,2'-Oxydiethanol	1000: 72 h Skeletonema costatum mg/L EC50	75200: 96 h Pimephales promelas mg/L LC50 flow-through	84000: 48 h Daphnia magna mg/L EC50
Neutralised Benzotriazole	231: 72 h Scenedesmus subspicatus mg/L EC50	25: 96 h Lepomis macrochirus mg/L LC50	91: 48 h Daphnia magna mg/L EC50
2-Butoxyethanol	1840: 72 h Pseudikirchneriella subcapitata mg/L EC50	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50 1474: 96 h Oncorhynchus mykiss mg/L LC50	1698 - 1940: 24 h Daphnia magna mg/L EC50 1550: 48 h Daphnia magna mg/L EC50
Neutralised Propylidynetrimethanol, propoxylated, reaction products with ammonia			13: 48 h Daphnia magna mg/L EC50
Neutralised Potassium Hydroxide		80: 96 h Gambusia affinis mg/L LC50 static 165: 24 h Poecilia reticulata mg/L LC50	270: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available

Bioaccumulative potential

Chemical name	Partition coefficient
2,2'-Oxydiethanol	-1.98
2-Butoxyethanol	0.81
Neutralised Propylidynetrimethanol, propoxylated, reaction products with ammonia	-1.13
Neutralised Potassium Hydroxide	0.83

Mobility

Will likely be mobile in the environment due to its water solubility Miscible with 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

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)
Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

New Zealand

HSNO Hazard Classification:
Not Determined

HSNO Approval Number:
Not Determined
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	Complies

AICS	Complies
PICCS	Complies
KECL	Does not Comply
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
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