SAFETY DATA SHEET



MV.4

SHEFFIELD GROUP

Catalogue number: MV.4001 Version No: 1.1

Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	MV.4
Synonyms	MV.4001
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Metal working fluid
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Details of the manufacturer/importer

Registered company name	SHEFFIELD GROUP
Address	55 Pendlebury Road, Cardiff 2285 NSW Australia
Telephone	+61 2 4957 8787
Fax	+61 2 4957 3737
Website	www.sheffield.com.au
Email	sales@sheffield.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 11 26
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable	
GHS Classification	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2	
	Classification drawn from HCIS and ECHA C&L Inventory.	

Label elements

WARNING	
Causes skin irritation	
Causes serious eye irritation	
Precautionary statement(s) Prevention	
Wear protective gloves and eye protection	
Wash contaminated skin thoroughly after handling	

Precautionary statement(s) Response

P305+P351+P338+P337+P313	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.	
P302+P352+P362+P332+P313	IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice / attention.	

Precautionary statement(s) Storage

Not applicable

Precautionary statement(s) Disposal

Not applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
112-34-5	<10	diethylene glycol monobutyl ether
141-43-5	<3	ethanolamine

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Wash out immediately with fresh running water for 10-15 minutes. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Extinguishing media Foam. Dry chemical powder. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only. Water spray or fog - Large fires only.	
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Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	Combustible. Slight fire hazard when exposed to heat or flame. Heat may cause expansion or decomposition with violent rupture of containers emit acrid smoke. Decomposes on heating and produces toxic fumes of: carbon monoxide (CO), carbon dioxide (CO2) ,phosphorus oxides (POx) and other pyrolysis products typical of burning organic material May emit acrid smoke Mists containing combustible materials may be explosive.
HAZCHEM	Not applicable

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Minor Spills Flush away with copious amounts of water. Major Spills Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Absorb on sand, dirt, vermiculite or similar absorbent material. Place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. PPE Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	Avoid all personal contact. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
Other information	Protect against direct sunlight. Keep away from heat

Conditions for safe storage, including any incompatibilities

Suitable container	Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	ethanolamine	ethanolamine	3 ppm / 7.5 mg/m3	15 mg/m3 / 6 ppm	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
ethanolamine	ethanolamine		6 ppm	170 ppm	1000 ppm
diethylene glycol monobutyl ether	Butoxyethoxy)ethanol, 2		30 ppm	33 ppm	200 ppm
Ingredient	Original IDLH	Revised	IDLH		
ethanolamine	30 ppm	Not Availa	able		
diethylene glycol monobutyl ether	Not Available	Not Availa	able		

Exposure controls

Appropriate engineering controls	Maintain adequate ventilation at all times. In most circumstances natural ventilation systems are adequate. If ventilation is poor, then the use of a local exhaust ventilation system is recommended.
Personal protection	
Eye and face protection	Safety glasses with side shields OR Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate i r r i t a n t s Lens should be removed at the first signs of eye rednessor irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.
Skin protection	See Hand protection below
Hands/feet protection	Wear elbow length chemical protective gloves. Neoprene or butyl are recommended for this application.
Body protection	See Other protection below
Other protection	Barrier cream. Skin cleansing cream. Eye wash unit.
Thermal hazards	Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Yellow liquid		
Physical state	Liquid	Relative density (Water = 1)	1.06
Initial boiling point and boiling range (°C)	100	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	9.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Odour	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Viscosity	5
Lower Explosive Limit(%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Emulsifiable	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	Reaction with oxidising agents possible. Acid
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
Ingestion	At sufficiently high doses the material may be nephrotoxic (i.e. poisonous to the kidney). Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	No relative data listed.

Toxicological effects of ingredients

diethylene glycol	Acute toxicity	Oral LD50 (rat) 5660 mg/kg Dermal LD50 (Rabbit) 4000 mg/kg Inhalation LC50 (rat) 1-5 mg/L 4h
monobutyl ether	Skin corrosion/irritation	Not irritating
	Eye damage/irritation	Irritating to the eyes
	Respiratory/skin sensitization	Not sensitizing
	Germ cell mutagenicity	No adverse effect observed
	Carcinogenicity	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
	Reproductive toxicity	Based on available data, the classification criteria are not met
	STOT (single exposure)	No available data
	STOT (repeated exposure)	No available data
	Aspiration toxicity	No available data
ethanolamine	Acute toxicity	Oral LD50 (rat) 1089 mg/kg Dermal LD50 (rat) 2504 mg/kg Inhalation LC50 >1300mg/m3 6h
	Skin corrosion/irritation	Causes severe skin burns and eye damage.
	Eye damage/irritation	Causes serious eye damage
	Respiratory/skin sensitization	No sensitizing effect
	Germ cell mutagenicity	The substance was not genotoxic in a test with mammals
	Carcinogenicity	Not carcinogenic
	Reproductive toxicity	Not classified
	STOT (single exposure)	May cause respiratory irritation
	STOT (repeated exposure)	The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies
	Aspiration toxicity	No aspiration hazard expected

SECTION 12 ECOLOGICAL INFORMATION

Toxicity Endpoint Duration (Hr.) Species Value diethylene glycol monobutyl LC50 96 Fish 1-300mg/L EC50 48 Crustacea 4-950mg/L ether EC50 72 Algae or other aquatic plants 1-101mg/L NOEC 96 Algae or other aquatic plants >=100mg/L ethanolamine LC50 96 Fish 2-70mg/L EC50 48 Crustacea 32.6mg/L EC50 72 2.1mg/L Algae or other aquatic plants 504 0.85mg/L NOEC Crustacea

Harmful to aquatic organisms.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
diethylene glycol monobutyl ether	LOW	LOW
ethanolamine	LOW	LOW

Bio accumulative potential

Ingredient	Bioaccumulation
diethylene glycol monobutyl ether	LOW (BCF = 0.46)
ethanolamine	LOW (LogKOW = -1.31)

Mobility in soil

Ingredient	Mobility
diethylene glycol monobutyl ether	LOW (KOC = 10)
ethanolamine	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal • Recycle containers whenever possible. • Product residues and containers should be disposed of in accordance with local government regulations.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (Not Applicable): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

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

DIETHYLENE GLYCOL MONOBUTYL ETHER IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

ETHANOLAMINE IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 Australia Inventory of Industrial Chemicals (AIIC)

SECTION 16 OTHER INFORMATION

Revision Schedule				
Revision Date	Not applicable			
Initial Date	07/12/2020			
SDS Version Summary				
Version	Issue Date	Sections Updated		
1.1	07/12/2020	Not applicable		

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources such as the ECHA C&L Chemical Inventory, HSNO (CCID) New Zealand, NICNAS and HCIS Australia

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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End of SDS