

SAFETY DATA SHEET

POLYGARD UNIVERSAL ANTIFREEZE (BS6580)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME POLYGARD UNIVERSAL ANTIFREEZE (BS6580)
PRODUCT NO. MIS16400, 16405, 16410, 16415, 16420, 16422, 16423
16401, 16412, 16424
INTERNAL ID 16901
SUPPLIER MISWA CHEMICALS LTD
CASWELL ROAD
BRACKMILLS
NORTHAMPTON
NN4 7PW
T: +44 (0)1604 701111
F: +44 (0)1604 701120
admin@miswa.com

2 HAZARDS IDENTIFICATION

Harmful if swallowed.

CLASSIFICATION Xn;R22.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
DISODIUM TETRABORATE PENTAHYDRATE	215-540-4	12179-04-3	1-5%	Repr. Cat. 2;R60,R61
ETHANEDIOL	203-473-3	107-21-1	60-100%	Xn;R22

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once.

Get medical attention.

Provide rest, warmth and fresh air.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

INGESTION

DO NOT INDUCE VOMITING!

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

Remove victim immediately from source of exposure.

Drink plenty of water.

Get medical attention immediately!

Provide rest, warmth and fresh air.

SKIN CONTACT

Remove contaminated clothing.

Wash the skin immediately with soap and water.

Get medical attention if irritation persists after washing.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing.

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Promptly wash eyes with plenty of water while lifting the eye lids.

Continue to rinse for at least 15 minutes.

Get medical attention promptly if symptoms occur after washing.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable.

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Do not use water jet as an extinguisher, as this will spread the fire.

SPECIFIC HAZARDS

Combustible

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Avoid inhalation of vapours and contact with skin and eyes.

Do not smoke, use naked flames or other sources of ignition.

SPILL CLEAN UP METHODS

Collect and reclaim or dispose in sealed containers in licensed waste.

Wash contaminated area with water.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact.

Do not handle broken packages without protective equipment.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place.

Keep in original container.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ETHANEDIOL	WEL		10 mg/m3		104 mg/m3	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

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RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

HAND PROTECTION

Use protective gloves.

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA!

Wash at the end of each work shift and before eating, smoking and using the toilet.

Promptly remove any clothing that becomes contaminated.

Wash promptly with soap & water if skin becomes contaminated.

Use appropriate skin cream to prevent drying of skin.

When using do not eat, drink or smoke.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Clear liquid		
COLOUR	Blue		
ODOUR	Mild Characteristic		
SOLUBILITY	Completely soluble in water		
BOILING POINT (°C)	>165°C	RELATIVE DENSITY	1.12-1.13 @ 20°C
pH-VALUE, DILUTED SOLUTION	7.5-8.0 @ 50% water solution	FLASH POINT (°C)	120°C CC (Closed cup).

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

MATERIALS TO AVOID

Strong acids.

Strong oxidising substances.

Strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 >2000 mg/kg (oral rat)

TOXIC CONC. - LC 50 >5 mg/l/4h (inh-rat)

INHALATION

Vapour may irritate respiratory system or lungs.

INGESTION

Harmful: possible risk of irreversible effects if swallowed. Drowsiness, dizziness, disorientation, vertigo. There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. For Ethanediol, the estimated fatal dose for man is 100 millilitres (1/2 cup). This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs.

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SKIN CONTACT

Prolonged and frequent contact may cause redness and irritation. Not a skin sensitiser.

EYE CONTACT

Splashes may irritate.

OTHER HEALTH EFFECTS

This substance has no evidence of carcinogenic properties.

ROUTE OF ENTRY

Ingestion.

MEDICAL SYMPTOMS

Drowsiness, dizziness, disorientation, vertigo.

SPECIFIC EFFECTS

May cause damage to the kidneys.

12 ECOLOGICAL INFORMATION

LC 50, 96 Hrs, FISH mg/l >100mg/l

EC 50, 48 Hrs, DAPHNIA, mg/l >100mg/l

IC 50, 72 Hrs, ALGAE, mg/l >100mg/l

MOBILITY

The product is water soluble and may spread in water systems.

BIOACCUMULATION

The product does not contain any substances expected to be bioaccumulating.

DEGRADABILITY

The product is biodegradable, but it must not be discharged into drains without permission from the authorities.

The product is degraded completely by photochemical oxidation.

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

No transport warning sign required.

ROAD TRANSPORT NOTES

Not Classified

RAIL TRANSPORT NOTES

Not Classified.

SEA TRANSPORT NOTES

Not Classified.

AIR TRANSPORT NOTES

Not Classified.

15 REGULATORY INFORMATION

LABELLING



Harmful

CONTAINS

ETHANEDIOL

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RISK PHRASES

R22 Harmful if swallowed.

SAFETY PHRASES

S2 Keep out of the reach of children

S13 Keep away from food, drink and animal feeding stuffs.

S46 If swallowed, seek medical advice immediately and show this container or label.

S56 Dispose of this material and its container to hazardous or special waste collection point.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

16 OTHER INFORMATION

ISSUED BY

HS&E Manager.

REVISION DATE 21/12/2009

REV. NO./REPL. SDS 1

GENERATED

SAFETY DATA SHEET STATUS

Approved.

RISK PHRASES IN FULL

R22 Harmful if swallowed.

R60 May impair fertility.

R61 May cause harm to the unborn child.