Safety Data Sheet

GEMSTOP FC II PART B

Version: 1.1
Issued Date: 16/08/2022
Revision Date: 16/08/2022
Issued by: Coating Technologies Limited

1. IDENTIFICATION

GHS Product Identifier

Gemstop FC II - Part B

Product Code(s)

G7113B

Company Name

Coating Technologies Limited

Address

10 Andromeda Crescent, East Tamaki, Auckland 2013

Telephone/Fax Number

Telephone: +64 9 837 0897

Emergency phone number

+64 9 837 0897 (Monday to Friday 07:30 to 17:00)

E-mail Address

technical@cotec.co.nz

Recommended use of the chemical and restrictions on use

Industrial application

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

HSNO Status: Classified as hazardous according to the criteria of HSNO.

DG Status: Classified as Dangerous Goods according to NZS5433.

Signal Word: Danger

HSNO Code	HSNO classifications	Hazard statements	GHS Pictogram
6.1D (oral)	acute oral toxicity Category 4	H302 - Harmful if swallowed.	
6.1C (dermal)	acute dermal toxicity Category 3	H311 - Toxic in contact with skin.	
8.2B	skin corrosion Category 1B	H314 - Causes severe skin burns and eye damage.	
6.5B	skin sensitisation Category 1	H317 - May cause an allergic skin reaction.	
8.3A	serious eye damage Category 1	H318 - Causes serious eye damage.	

6.5A	respiratory sensitisation Category 1	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
6.8B	reproductive toxicity Category 2	H361 - Suspected of damaging fertility or the unborn child.	
6.9B (Repeated exposure)	specific target organ toxicity - repeated exposure Category 2	H373 - May cause damage to organs through prolonged or repeated exposure.	
9.1A	hazardous to the aquatic environment acute Category 1	H410 - Very toxic to aquatic life with long lasting effects.	

Precautionary Statements

General	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
Prevention	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.
Response	
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P304+P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
Storage	
P405	Store locked up.
Disposal	
P501	Do not let this product enter the environment. Do not dispose of in waterways or sewers. Dispose of this material

	and its container as hazardous waste, via a licensed facility. See local council for disposal/recycling information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion - %w/w
Diethylene triamine	111-40-0	10-40
Bisphenol A	80-05-7	10-30
Aminoethylpiperazine	140-31-8	<0.5
Ethylenediamine	107-15-3	<0.5
Benzyl alcohol	100-51-6	1-20
Nonyl phenol	84852-15-3	1-20
Epoxy resin	25068-38-6	1-20
Ingredients determined not to be hazardous or below the hazardous threshold.		To 100%

Preparation Description

Epoxy hardener

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin

Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact the National Poisons Centre (0800 764 766), or a doctor, at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam, water fog or water mist.

Unsuitable Extinguishing

Water with full jet.

Hazards from Combustion Products

Toxic products may be given off in a fire.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Increase ventilation. If possible, contain the spill. Wear appropriate personal protective equipment and clothing to prevent exposure. Spillage can be slippery. Place inert absorbent material onto spillage. Collect the material and place into a suitable labelled container. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations. Dispose of waste according to the applicable local and national regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Use only in a well-ventilated area. Keep containers tightly closed. Prevent the buildup of dusts, mists or vapours in the work atmosphere. Maintain high standards of personal hygiene i.e., washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatibilities

Protect from freezing. Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Exposure Standards			
Product/Ingredient	**WES/TWA**	**WES/STEL**	**Reference**
Diethylene triamine (111-40-0)	1ppm; 4.2 mg/m3		NZ-WES
Ethylenediamine (107-15-3)	10ppm; 25 mg/m3		NZ-WES

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

Use with good general ventilation. If mists or vapours are produced, local exhaust ventilation should be used.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable vapor/mist filter should be used. If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable vapor/mist filter should be used. Reference should be made to Australia/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with side shields, chemical goggles, or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances i.e., methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Colour

Yellow/Straw

Odour

Amine

Decomposition Temperature

Not available

Melting Point

Not available

Boiling Point

Not available

Solubility in Water

Soluble

Specific Gravity

0.50-0.8

pH when packed

Not applicable

Vapour Pressure

Not available

Vapour Density (Air=1)

Not available

Evaporation Rate

Not available

Odour Threshold

Not available

Partition Coefficient: n-octanol/water

Not available

Flash Point

Not applicable

Flammability

Noncombustible material

Auto-Ignition Temperature

Not applicable

Flammable Limits - Lower

Not applicable

Flammable Limits - Upper

Not applicable

Kinematic Viscosity

Not available

Dynamic Viscosity

Not available

Freeze thaw stability

Stable

10. STABILITY AND REACTIVITY

Reactivity

Not expected to be a problem.

Chemical Stability

Stable under normal conditions of storage and handling

Conditions to Avoid

Extremes of temperature and direct sunlight. Protect from freezing.

Incompatible materials

Strong oxidising agents. Strong acids and bases.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes.

Possibility of hazardous reactions

Not available

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Original data sourced from raw material SDSs and/or CCID.

Acute Oral Toxicity	Harmful if swallowed.
Acute Dermal Toxicity	Toxic in contact with skin.
Acute Inhalation Toxicity	Not classified
Acute Aspiration Toxicity	Not classified
Skin Irritancy/Corrosion	Causes severe skin damage.
Eye Irritancy/Corrosion	Causes serious eye damage.
Respiratory Sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sensitisation	May cause an allergic skin reaction.
Mutagenic	Suspected of causing genetic defects.
Carcinogenic	Not classified
Reproductive/Development Toxicity	Suspected of damaging fertility or the unborn child.
STOT-SE	Not classified
STOT-RE	May cause damage to organs through prolonged or repeated exposure.

Estimated Acute Toxicity - product
LD50 Oral: 300 - <2,000 mg/kg
LD50 Dermal: 200 - <1,000 mg/kg
LC50 Inhalation: >5 mg/L/4H

Ingestion

Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

Inhalation

Inhalation of product vapours may cause irritation of the nose, throat, and respiratory system.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling.

Eye

May be irritating to eyes. The symptoms may include redness, itching and tearing.

Chronic Effects

Prolonged or repeated exposure to skin may cause dermatitis.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxic according to criteria of HSNO.

Toxic to aquatic life with long lasting effects.

Product Calculated Ecotoxicity: LE(C)50 >1 - ≤10 mg/L

Ecotoxic Ingredients:

Ingredient	Ecotoxic Classification
Diethylene triamine	9.1C - hazardous to the aquatic environment chronic Category 3
Bisphenol A	9.1A - hazardous to the aquatic environment acute Category 1
Nonyl phenol	9.1A - hazardous to the aquatic environment chronic Category 1
Epoxy resin	9.1B - hazardous to the aquatic environment chronic Category 2

Toxicity

Product Calculated Aquatic Ecotoxicity – L(E)C50: >100 mg/L

Persistence and degradability

Not available

Mobility

Not available

Bioaccumulative Potential

Not available

Other Adverse Effects

Not available

Environmental Protection

Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

Product Disposal

This product can be disposed through a licensed commercial waste collection service. Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This is a water-based/water-soluble product

and therefore can be sent through a Wastewater Treatment Plant and after treatment can be discharged into environment through the sewerage or drainage systems as authorized. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose into the sewerage system. Dispose of waste according to applicable local and national regulations. In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the ERMA New Zealand website under specific group standards.

Container Disposal

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous. In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information

Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2007 Transport of Dangerous Goods on Land.

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Regulated for transport	Keep separated from foodstuffs
UN Number:	2922
Proper Shipping Name:	Corrosive liquids, toxic, n.o.s.
Class:	8,6.1
Packing Group:	II
Hazchem:	2X
Marine Pollutant:	Yes

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the criteria of HSNO.

Group Standard:	HSR002677 Surface Coatings and Colourants (Acutely Toxic, Corrosive) Group Standard 2020
HSNO CONTROLS	
SDS required when any quantity Is present in a workplace.	
Emergency Response Plan And Secondary Containment required when >100L is present in a workplace.	
Toxic signage required when storing >1,000L is stored.	
Corrosive signage required when >250L is stored.	
Ecotoxic signage required when >100L is stored.	
(Acute toxicity, Cat3) Hazardous Substances Location	>1,000L

Compliance Certificate required for:	
(Skin corrosive, Cat2) Hazardous Substances Location Compliance Certificate required for:	>250L
Certified Handler	Not Required
Tracking	Not Required
All ingredients are on the New Zealand Inventory of Chemicals (NZIOC), or exempt.	
Any existing national regulations on the handling of dangerous substances should be observed. Controls for hazardous substances are based upon current knowledge. Where multiple chemicals are stored, controls will need to take into account aggregate quantities. Contact a WorkSafe approved Compliance Certifier for further information and guidance.	

16. OTHER INFORMATION

Contact Person/Point

IMPORTANT ADVICE: This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the supplier listed in section 1 of the SDS. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Technical Contact Numbers

For further information, contact Coating Technologies Ltd on +64 9 837 0897, however, in emergencies contact 0800 734 607 (24H)

Glossary

HSNO = Hazardous Substances and New Organisms Act 1996

EPA = Environmental Protection Authority (NZ)

CCID = Chemical Classification & Identification Database (EPA)

WES = NZ Work Exposure Standard

TWA = Time Weighted Average

STEL = Short Term Exposure Limit