



## Safety Data Sheet

### prepared to UN GHS Revision 3

### 1. Identification of the Substance/Mixture and the Company/Undertaking

<b>1.1 Product Identifier</b>	F01-240-FCE-B-STLGRY-4.819	<b>Revision Date:</b>	15/02/2021
<b>Product Name:</b>	Flowcoat ESD BVG - Hardener B - Steel Grey	<b>Supersedes Date:</b>	15/02/2021
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	No Information		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Manufacturer/Supplier</b>	Tremco CPG Australia Pty Ltd 63 Radley Street Virginia QLD 4014 Australia T. +61 7 3205 7115 F. +61 7 3205 3116 www.flowcreteaustralia.com.au		
<b>Datasheet information obtainable from :</b>	asia@tremcocpg.com		
<b>1.4 Emergency telephone number:</b>	CHEMTREC 1-800-424-9300 (Inside US) CHEMTREC +1 703 5273887 (Outside US)		

### 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4  
 Hazardous to the aquatic environment, Chronic, category 2  
 STOT, repeated exposure, category 2  
 Skin Corrosion, category 1  
 Skin Sensitizer, category 1

#### 2.2 Label elements

##### Symbol(s) of Product



##### Signal Word

Danger

##### Named Chemicals on Label

Benzyl alcohol, 4,4'-methylenebicyclohexanamine

**HAZARD STATEMENTS**

Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

**PRECAUTION PHRASES**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim 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 so. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

**2.3 Other hazards**

No Information

**Results of PBT and vPvB assessment:**

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**3. Composition/Information On Ingredients****3.2 Mixtures****Hazardous Ingredients**

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
1761-71-3	4,4'-methylenebicyclohexanamine	25 - <50
100-51-6	Benzyl alcohol	25 - <50

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
1761-71-3	GHS05-GHS07-GHS08-GHS09	H302-314-317-373-411	0
100-51-6	GHS07	H302-332	0

**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.**4. First-aid Measures****4.1 Description of First Aid Measures****GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice.**AFTER INHALATION:** Move to fresh air. Consult a physician after significant exposure.**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Flush skin with large amounts of water. If irritation develops and persists, get medical attention.**AFTER EYE CONTACT:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**Self protection of the first aider:**

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**4.2 Most important symptoms and effects, both acute and delayed**

Causes burns. Harmful in contact with skin and if swallowed. Corrosive after repeated contact with skin and mucous membranes.

**4.3 Indication of any immediate medical attention and special treatment needed**

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

**5. Fire-fighting Measures****5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam

**FOR SAFETY REASONS NOT TO BE USED:** Alcohol, Alcohol based solutions, any other media not listed above.

**5.2 Special hazards arising from the substance or mixture**

No Information

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

**6. Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment.

**6.2 Environmental precautions**

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

**6.3 Methods and material for containment and cleaning up**

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**6.4 Reference to other sections**

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

**7. Handling and Storage****7.1 Precautions for safe handling**

**INSTRUCTIONS FOR SAFE HANDLING:** Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

**PROTECTION AND HYGIENE MEASURES:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Avoid contact with the skin and the eyes. Wash hands before eating, drinking, or smoking.

**7.2 Conditions for safe storage, including any incompatibilities**

**CONDITIONS TO AVOID:** No Information

**STORAGE CONDITIONS:** Store in original container. Keep in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

**7.3 Specific end use(s)**

No specific advice for end use available.

## 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (AU)

Name	CAS-No.	TWA ppm	STEL ppm	TWA mg/m3	STEL mg/m3
4,4'-methylenebicyclohexanamine	1761-71-3				
Benzyl alcohol	100-51-6				

Name	CAS-No.	OEL Note
4,4'-methylenebicyclohexanamine	1761-71-3	
Benzyl alcohol	100-51-6	

**FURTHER INFORMATION:** Refer to the regulatory exposure limits for the workforce enforced in each country.

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Respirator with a vapor filter.

**EYE PROTECTION:** Tightly fitting safety goggles.

**HAND PROTECTION:** Impervious gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Rubber or plastic apron.

**OTHER PROTECTIVE EQUIPMENT:** No Information

**ENGINEERING CONTROLS:** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Clear Light Yellow Liquid
Physical State	Liquid
Odor	Ammoniacal
Odor threshold	Not determined
pH	Alkaline
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	N.D. - N.D.
Flash Point, (°C)	93
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	Not determined
Vapour Pressure	Not determined
Vapour density	Not determined
Relative density	Approx. 1.02
Solubility in / Miscibility with water	<0.1 g/l
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined

<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	Not determined
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

**9.2 Other information**

<b>VOC Content g/l:</b>	Not determined
<b>Specific Gravity (g/cm<sup>3</sup>)</b>	1.010

## 10. Stability and Reactivity

**10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**

No decomposition if stored and applied as directed. Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous polymerisation does not occur.

**10.4 Conditions to avoid**

No Information

**10.5 Incompatible materials**

Strong oxidizing agents. Acids and bases. Amines.

**10.6 Hazardous decomposition products**

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute Toxicity:

Oral LD50: No information available.

Inhalation LC50: No information available.

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
1761-71-3	4,4'-methylenebicyclohexanamine	1200 mg/kg oral, rat	2110 mg/kg, rat		0.000	0.000
100-51-6	Benzyl alcohol	1620 mg/kg, rat		>4178 mg/m <sup>3</sup> , 4h	0.000	0.000

#### Additional Information:

No Information

## 12. Ecological Information

### 12.1 Toxicity:

EC50 48hr (Daphnia): No information

IC50 72hr (Algae): No information

LC50 96hr (fish): No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

**12.6 Other adverse effects:** No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
1761-71-3	4,4'-methylenebicyclohexanamine	No information	No information	
100-51-6	Benzyl alcohol	230 mg/l - Daphnia magna (water flea)	700 mg/l - Pseudokirchneriella subcapitata (green algae)	460 mg/l - Pimephales promelas (fathead minnow)

## 13. Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport Information

<b>14.1 UN number</b>	2735
<b>14.2 UN proper shipping name</b>	Amines, liquid, corrosive n.o.s.
<b>Technical name</b>	Not applicable
<b>14.3 Transport hazard class(es)</b>	Not applicable
<b>Subsidiary shipping hazard</b>	Not applicable
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazards</b>	Yes
<b>14.6 Special precautions for user</b>	Not applicable
<b>EmS-No.:</b>	F-A, S-B
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b>	Not applicable
<b>14.8 ADG Hazchem Code</b>	2X

## 15. Regulatory Information

**15.1 Safety, health and environmental regulations/legislation for the substance or mixture:**

### National Regulations:

Please contact Manufacturer / Supplier for details related to inventory listing of national regulations.

Australia Australia Inventory of Industrial Chemicals (AIIC)  
 China Inventory of Existing Chemical Substances (IECSC)  
 Japan Inventory of Existing and New Chemical Substances (ENCS)  
 Korea Korea Existing Chemicals Inventory (KECI)  
 New Zealand New Zealand Inventory of Chemicals (NZIoC)  
 Philippines Philippines Inventory of Chemicals and Chemical Substances (PICCS)  
 Taiwan Taiwan Chemical Substance Inventory (TCSI)  
 Thailand Thailand Existing Chemicals Inventory (TECI)  
 Vietnam National Chemical Inventory (NCI)

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16. Other Information

**Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

H302 Harmful if swallowed.

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

**Reasons for revision**

Substance and/or Product Properties Changed in Section(s):

- 01 - Identification
- 02 - Hazard Identification
- 03 - Composition/Information On Ingredients
- 05 - Fire-fighting Measures
- 08 - Exposure Controls/Personal Protection
- 09 - Physical and Chemical Properties
- 11 - Toxicological Information
- 12 - Ecological Information
- 14 - Transportation Information
- 15 - Regulatory Information

Revision Statement(s) Changed

## List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark;  
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;  
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

## Acronym &amp; Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m <sup>3</sup>	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations



IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.