Flowcrete
for the world at your feet

Safety Data Sheet

prepared to UN GHS Revision 3

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

1.1 Product Identifier F01-700-FACC(BO)-A-CLR-5

Revision Date: 06/04/2017

Supercedes Date: New SDS

Product Name: Flowfast Accelerator

1.2 Relevant identified uses of the substance or mixture and uses advised against No Information

1.3 Details of the supplier of the safety data sheet

Importer:

Flowcrete Australia Pty Ltd
Unit 2, 41 Deakin Street
Brendale Queensland 4500
Australia
Phone: +61 7 3205 7115
Fax: +61 7 3205 3116
australia@flowcrete.com
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1.4 Emergency telephone number:

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, Oral, category 4
Eye Irritation, category 2
Flammable Liquid, category 2
STOT, single exposure, category 3, RTI
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

Methyl methacrylate, n,n-bis-(2-hydroxypropyl)-p-toluidine

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.

PRECAUTION PHRASES

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P235	Keep cool.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
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+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P403+233	Store in a well-ventilated place. Keep container tightly closed.

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

CAS-No.	Chemical Name	%
80-62-6	Methyl methacrylate	75-100
38668-48-3	n,n-bis-(2-hydroxypropyl)-p-toluidine	1.0-2.5

CAS-No.	GHS Symbols	GHS Hazard Statements	M-Factors
80-62-6	GHS02-GHS07	H225-315-317-335	0
38668-48-3	GHS05-GHS06	H300-318-412	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: No Information
AFTER INHALATION: Move to fresh air. Keep respiratory tract clear.
AFTER SKIN CONTACT: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.
AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. 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

No Information

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:

Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. Water mistDry powderFoamCarbon dioxide (CO2)Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

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: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Take measures to prevent the build up of electrostatic charge. Vapours may form explosive mixtures with air. Provide exhaust ventilation close to floor level. Wear personal protective equipment. Open drum carefully as content may be under pressure. Use only in well-ventilated areas. Keep product and empty container away from heat and sources of ignition. Use only explosion-proof equipment. Have fire extinguishers ready before opening the drum. Do not use sparking tools.
PROTECTION AND HYGIENE MEASURES: Keep working clothes separately. Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice for diagnostics.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat. Strong sunlight for prolonged periods.
STORAGE CONDITIONS: Store in original container. Keep in an area equipped with solvent resistant flooring. 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
Methyl methacrylate	80-62-6	50	100	208	416
n,n-bis-(2-hydroxypropyl)-p-toluidine	38668-48-3				

Name	CAS-No.	OEL Note
Methyl methacrylate	80-62-6	
n,n-bis-(2-hydroxypropyl)-p-toluidine	38668-48-3	

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

8.2 Exposure controls

Personal Protection
RESPIRATORY PROTECTION: Preferably a compressed airline breathing apparatus. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Respirator with filter for organic vapor.
EYE PROTECTION: Eye wash bottle with pure water. Tightly fitting safety goggles.
HAND PROTECTION: Solvent-resistant 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). Follow the skin protection plan. Remove and wash contaminated clothing before re-use. Flame retardant antistatic protective clothing
OTHER PROTECTIVE EQUIPMENT: No Information
ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Colourless liquid, cloudy.
Physical State	Liquid

Odor	Strong acrylic (MMA)
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	-48°C
Boiling point/range (°C)	101 - N.D.
Flash Point, (°C)	10
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	0.99
Solubility in / Miscibility with water	Practically insoluble at 20°C
Partition coefficient: n-octanol/water	1.38 log POW
Auto-ignition temperature (°C)	430
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not determined
Oxidising properties	Not determined

9.2 Other information

VOC Content g/l:	0
Specific Gravity (g/cm3)	0.120

10. Stability and Reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions. Explosive reaction may occur on heating or burning.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation does not occur.

10.4 Conditions to avoid
Direct sources of heat. Strong sunlight for prolonged periods.

10.5 Incompatible materials
Do not store together with oxidizing and self-igniting products.

10.6 Hazardous decomposition products
No Information

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.

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:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
80-62-6	Methyl methacrylate	7872 mg/kg (oral, rat)	>5000 mg/kg	3750 ppm (inhalation, rat)
38668-48-3	n,n-bis-(2-hydroxypropyl)-p-toluidine	25 mg/kg		

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

CAS-No.	Chemical Name	EC50 48hr	IC50 72hr	LC50 96hr
80-62-6	Methyl methacrylate	720 mg/l	No information	125.5 - 275.0 mg/l

38668-48-3	n,n-bis-(2-hydroxypropyl)-p-toluidine	No information	No information	No information

13. Disposal Considerations

13.1 **WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. Dispose of as hazardous waste in compliance with local and national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal. The product should not be allowed to enter drains, water courses or the soil.

14. Transport Information

14.1	**UN number**	1866
14.2	**UN proper shipping name**	Resin Solution
	Technical name	Methyl methacrylate, monomer, inhibited solution
14.3	**Transport hazard class(es)**	3
	Subsidiary shipping hazard	Not applicable
14.4	**Packing group**	II
14.5	**Environmental hazards**	N/A
14.6	**Special precautions for user**	Not applicable
	EmS-No.:	Not applicable
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**	Not applicable
14.8	**ADG Hazchem Code**	•3Y

15. Regulatory Information

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

National Regulations:

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	Not available

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:

H225	Highly flammable liquid and vapour.
H300	Fatal if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

No Information

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 & 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/m3	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.