



Safety Data Sheet

prepared to UN GHS Revision 3

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

- 1.1 **Product Identifier** 70001-FF-101 **Revision Date:** 05/23/2018
Product Name: Flowfast Standard Primer **Supersedes Date:** 04/18/2018
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against** Component of multicomponent industrial coatings - Industrial use.
- 1.3 **Details of the supplier of the safety data sheet**
- Manufacturer:** Flowcrete North America, Inc.
616 Spring Hill Drive, Suite 100
Spring, TX 77386
americas@flowcrete.com
www.flowcreteamericas.com
Tel: (936) 539-6700
Fax: (936) 539-6701
- Datasheet Produced by:** Mims, Robert - americas@flowcrete.com
- 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

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, Ethylene dimethacrylate, 2-hydroxyethyl methacrylate

HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
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.
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

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>%</u>
80-62-6	Methyl methacrylate	25-50
868-77-9	2-hydroxyethyl methacrylate	25-50
97-90-5	Ethylene dimethacrylate	1.0-2.5

<u>CAS-No.</u>	<u>GHS Symbols</u>	<u>GHS Hazard Statements</u>	<u>M-Factors</u>
80-62-6	GHS02-GHS07	H225-315-317-335	0
868-77-9	GHS07	H315-317-319	0
97-90-5	GHS07	H317-335	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:

Carbon Dioxide, Dry Chemical, Foam

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 (US)

<u>Name</u>	<u>CAS-No.</u>	<u>OSHAPEL</u>	<u>ACGIH TLV</u>
Methyl methacrylate	80-62-6	100.0 PPM	410.0 MG/M3
2-hydroxyethyl methacrylate	868-77-9		
Ethylene dimethacrylate	97-90-5		

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. Safety glasses.

HAND PROTECTION: Solvent-resistant gloves. 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:	bluish, highly turbid
Physical State	Liquid
Odor	sweet, ester like
Odor threshold	<1 ppm
pH	Non-aqueous
Melting point / freezing point (°C)	

	- 54 F
Boiling point/range (°C)	101 - N.D.
Flash Point, (°F / °C)	11.5 C / 52 F
Evaporation rate	>1 (butyl acetate =1)
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	2.1 - 12.5
Vapour Pressure	38.7 mbar
Vapour density	>1 @ 20C
Relative density	Not determined
Solubility in / Miscibility with water	approx. 16 g/l @ 20C
Partition coefficient: n-octanol/water	1.38 log POW
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	13-18 s at 23 C
Explosive properties	Not determined
Oxidising properties	N/A
9.2 Other information	
VOC Content g/l:	37
Density (lbs./gal)	1.27

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: 7872 mg/kg, rat
 Inhalation LC50: 3750 ppm, rat, 4h

Irritation: Not irritating

Corrosivity: No information available.

Sensitization: In humans, various types of allergic reactions have been observed (symptoms: headache, eye irritations, skin affections). Source: Reference literature (methyl methacrylate).

Repeated dose toxicity: No information available.

Carcinogenicity: Non-carcinogenic in inhalation and feeding studies carried out on rats, mice, and dogs. Source: Reference literature for methyl methacrylate.

Mutagenicity: Not mutagenic according to internationally accepted criteria. Source: Reference literature (methyl methacrylate).

Toxicity for reproduction: No indication of toxic effects were observed in reproduction studies in animals. Source: Reference literature (methyl methacrylate).

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>
80-62-6	Methyl methacrylate	7872 mg/kg (oral, rat)	>5000 mg/kg	3750 ppm (inhalation, rat)
97-90-5	Ethylene dimethacrylate	3300 mg/kg, oral, rat		

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia): 69 mg/l
 IC50 72hr (Algae): No information
 LC50 96hr (fish): >79 mg/l

12.2 Persistence and degradability: Readily degradable (OECD 301C, 14d)

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>
80-62-6	Methyl methacrylate	720 mg/l	No information	125.5 - 275.0 mg/l
868-77-9	2-hydroxyethyl methacrylate	No information	No information	
97-90-5	Ethylene dimethacrylate	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	UN1866
14.2 UN proper shipping name	RESIN SOLUTION
Technical name	Not applicable
14.3 Transport hazard class(es)	3
Subsidiary shipping hazard	Not applicable
14.4 Packing group	PG II
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
EmS-No.:	F-E, <u>S-E</u>
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Methyl methacrylate	80-62-6

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. Clean Air Act:

EPA Coating Category:	Floor Coatings
EPA VOC Content Limit (g/l):	400
Product VOC Content (g/l)	37
Thinning Recommendations:	None
Application Recommendations:	For professional use only.

* As per the federal EPA definition for coating categories in 40 CFR 59.401.

** Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS-No.</u>
No Chemical Name Found	

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
No Chemical Name Found	

California Proposition 65:

No Proposition 65 Chemicals exist in this product.

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory or exempt.

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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Reasons for revision

This is a new Safety Data Sheet (SDS).

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/m ³	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.