

Safety Data Sheet

Hazardous, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Flowfast Flexible Binder**

Recommended use: Binder

Supplier: Tremco CPG Australia Pty Ltd
ABN: 25 000 024 064
Street Address: 12/4 Southridge Street
Eastern Creek NSW 2766
Telephone: 02 9638 2755
Facsimile: 02 9638 2955

Emergency Telephone number: **02 9037 2994**

2. HAZARDS IDENTIFICATION

This material is hazardous according to the criteria of Safe Work Australia GHS 7.



Signal Word
Danger

Hazard Classifications

Flammable Liquids - Category 2
Skin Corrosion/Irritation - Category 2
Sensitisation - Skin - Category 1
Specific Target Organ Toxicity (Single Exposure) - Category 3 Respiratory Tract Irritation

Hazard Statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P235 Keep cool.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, lighting and all other equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust, fume, gas, mist, vapours or spray..
P264 Wash hands, face and all exposed skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing including eye/face protection.

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Response Precautionary Statements

- P101 If medical advice is needed, have product container or label at hand.
P302+P352 IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340 IF INHALED: Remove person to fresh air and keep 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.
P312 Call a POISON CENTER/doctor if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse
P370+P378 In case of fire: Use (insert appropriate media) to extinguish.

Storage Precautionary Statements

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal Precautionary Statement

- P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule:

DANGEROUS GOOD CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Dangerous Goods Class: 3

3. COMPOSITION INFORMATION

| CHEMICAL ENTITY | CAS NO | PROPORTION |
|--|----------|------------|
| 2-Propenoic acid, 2-methyl-, methyl ester | 80-62-6 | 25-50 % |
| 2-Propenoic acid, 2-ethylhexyl ester | 103-11-7 | 10-25 % |
| TRIETHYLENGLYCOL DIMETHACRYLATE | 109-16-0 | 1-2.5 % |
| DIETHANOL-P-TOLUIDIN | | <1 % |
| 2-HYDROXYETHYL METHACRYLATE | 868-77-9 | <1 % |
| Phenol, 4-methoxy- | 150-76-5 | <0.1 % |
| Ingredients determined to be Non-Hazardous | | Balance |
| | | 100% |

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Move to fresh air. Keep respiratory tract clear. If unconscious place in recovery position and seek medical advice. If not breathing, give artificial respiration. Call a physician if irritation develops or persists.

Skin Contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician if irritation develops or persists.

Eye contact: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

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Ingestion: Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention immediately.

PPE for First Aiders: Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Effects may be delayed. Move out of dangerous area. Take off all contaminated clothing immediately. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: •3YE

Suitable extinguishing media: If material is involved in a fire use alcohol resistant foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Highly flammable liquid and vapour. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition (open flames, pilot lights, furnaces, spark producing switches and electrical equipment etc) must be eliminated both in and near the work area. Do NOT smoke.

Fire fighting further advice: Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning or decomposing may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion or decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment.

LARGE SPILLS

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment.

Dangerous Goods - Initial Emergency Response Guide No: 14

7. HANDLING AND STORAGE

Handling: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Provide exhaust ventilation close to floor level. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Open drum carefully as content may be under pressure. Use only in well-ventilated areas.

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Vapours may form explosive mixtures with air. Keep product and empty container away from heat and sources of ignition. Take measures to prevent the build up of electrostatic charge. Do not use sparking tools. Use only explosion-proof equipment. Have fire extinguishers ready before opening the drum.

Storage: Store in original container. Never fill containers more than 80 % because aerial oxygen is necessary for stabilising. Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep in an area equipped with solvent resistant flooring. Do not store together with oxidizing and self-igniting products.

This material is classified as a Class 3 Flammable Liquid as per the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and/or the "New Zealand NZS5433: Transport of Dangerous Goods on Land" and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

| | TWA | | STEL | | NOTICES |
|---------------------|-----|-------|------|-------|---------|
| | ppm | mg/m3 | ppm | mg/m3 | |
| 4-Methoxyphenol | - | 5 | - | - | - |
| Methyl methacrylate | 50 | 208 | 100 | 416 | - |

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment: SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES, RESPIRATOR.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Wear safety shoes, overalls, gloves, safety glasses, respirator. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from butyl rubber, nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

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RECOMMENDATIONS FOR CONSUMER USE:

Engineering Measures: Ensure adequate ventilation, especially in confined areas. Personal protective equipment: Eye/Face Protection: Eye wash bottle with pure water. Safety glasses with side-shields. Hand Protection: Solvent-resistant gloves. Suitable material: butyl-rubber. Glove thickness. ≥ 0.7 mm. Break through time > 60 minutes. 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). Wear suitable gloves tested to EN 374. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred. Skin and body protection: Wear suitable protective clothing. Flame retardant antistatic protective clothing. Remove and wash contaminated clothing before re-use. Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. Filter type: A - A/P2. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Preferably a compressed airline breathing apparatus. Recommended Filter type: A - A/P2.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Keep away from food, drink and animal feedingstuffs. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Base Units: Kilogram
Form: Liquid
Colour: Colourless
Odour: Acrylic-like

Solubility: Insoluble in water
Solubility in water: Insoluble
Specific Gravity: No information available
Density: 0.99 g/cm³ (25 °C)
Relative Vapour Density (air=1): No information available
Vapour Pressure (20 °C): 38.7 mbar (MMA)
Flash Point (°C): 12 °C (MMA) / 54 °F
Flammability Limits (%): No information available
Autoignition Temperature (°C): No information available
Melting Point/Range (°C): -48 °C (MMA) / -54 °F
Boiling Point/Range (°C): 101 °C (MMA) / 214 °F
Decomposition Point (°C): No information available
Viscosity: 160 - 200 mPa.s 25°C
Evaporation Rate (n-Butyl acetate=1): No information available
Partition Coefficient: 1.38 log Pow (MMA)
Total VOC (g/Litre): No information available
Odour Threshold: 0.05 ppm
Explosive properties: Upper explosion limit 12.5 Vol.% (MMA) Lower explosion limit 2.1 Vol.% (MMA)
Oxidising properties: No information available

(Typical values only - consult specification sheet)
N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions to avoid: Heat, flames and sparks. Exposure to sunlight.

Incompatible materials: Avoid radical-forming starting agents, peroxides and reactive metals, Amines, Heavy metal compounds, Oxidizing agents, Reducing agents

Hazardous decomposition products: No hazardous decomposition products are known.

Hazardous reactions: Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers. Polymerisation occurs when exposed to white light, ultraviolet light or heat. Polymerisation is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Irritating to mucous membranes. May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: There are no data available for this product.

Eye contact: There are no data available for this product.

Acute toxicity

Inhalation: This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients): $LC_{50} > 20.0$ mg/L for vapours or $LC_{50} > 5.0$ mg/L for dust and mist.

Methyl methacrylate LC_{50} (Rat): 29.8 mg/l

Skin contact: This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Methyl methacrylate LD_{50} (Rabbit): >5000 mg/kg (Method: Dermal)
2-ETHYLHEXYL ACRYLATE LD_{50} (Rabbit): = 7522 mg/kg

Ingestion: This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients): $LD_{50} > 2,000$ mg/Kg bw

Methyl methacrylate LD_{50} (Rat): > 5000 mg/kg (Method: Oral)
2-ETHYLHEXYL ACRYLATE LD_{50} (Rat): 4435 mg/kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as a Category 1 Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as not an aspiration hazard.

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in respiratory irritation.

Chronic Toxicity

Mutagenicity: This material has been classified as not a mutagen.

Carcinogenicity: This material has been classified as not a carcinogen.

Reproductive toxicity (including via lactation): This material has been classified as not a reproductive toxicant.

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Specific target organ toxicity (repeat exposure): This material has been classified as not a specific hazard to target organs by repeat exposure.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as not hazardous for acute aquatic exposure. Acute toxicity estimate (based on ingredients): > 100 mg/L

Methyl methacrylate 48hr EC50 (Daphnia magna): 69 mg/L
2-ETHYLHEXYL ACRYLATE 72hr EC50 (algae): 44 mg/L
Methyl methacrylate 96hr EC50 (algae): 170 mg/L
2-ETHYLHEXYL ACRYLATE 96hr EC50 (algae): 47 mg/L
Methyl methacrylate 96hr LC50 (bluegill sunfish): 170 - 206 mg/L flow-through
Methyl methacrylate 96hr LC50 (bluegill sunfish): 153.9 - 341.8 mg/L static
Methyl methacrylate 96hr LC50 (fathead minnow): 243 - 275 mg/L flow-through
Methyl methacrylate 96hr LC50 (fathead minnow): 125.5 - 190.7 mg/L static
2-hydroxyethyl methacrylate 96hr LC50 (fathead minnow): 213 - 242 mg/L flow-through
2-hydroxyethyl methacrylate 96hr LC50 (fathead minnow): 227 mg/L
4-Methoxyphenol 96hr LC50 (fathead minnow): 84.3 mg/L flow-through
Methyl methacrylate 96hr LC50 (fish): 326.4 - 426.9 mg/L static
Methyl methacrylate 96hr LC50 (fish): 326.4 - 426.9 mg/L static
Methyl methacrylate 96hr LC50 (rainbow trout): 79 mg/L flow-through
Methyl methacrylate 96hr LC50 (rainbow trout): 79 mg/L static
4-Methoxyphenol LC50: 96hr LC50 (rainbow trout): 28.5 mg/L flow-through

Long-term aquatic hazard: This material has been classified as not hazardous for chronic aquatic exposure. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log K_{ow} < 4.

Ecotoxicity: No information available.

Persistence and degradability: The product is partially biodegradable.

Bioaccumulative potential: Chemical Name: METHYL METHACRYLATE log Pow: 0.7
Chemical Name: 2-ETHYLHEXYL ACRYLATE log Pow: 4.64
Chemical Name: 2-HYDROXYETHYL METHACRYLATE log Pow: 0.47
Chemical Name: 4-Methoxyphenol log Pow: 1.34

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of as hazardous waste in compliance with local and national regulations. European Waste Catalogue. 080111 - waste paint and varnish containing organic solvents or other dangerous substances. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not burn, or use a cutting torch on, the empty drum. Waste Code. 150110 - packaging containing residues of or contaminated by dangerous substances.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

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UN No: 1866
Dangerous Goods Class: 3
Packing Group: II
Hazchem Code: •3YE
Emergency Response Guide No: 14
Limited Quantities 5 L

Proper Shipping Name: RESIN SOLUTION

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), flammable gases (Class 2.1), if both are in bulk, toxic gases (Class 2.3), spontaneously combustible substances (Class 4.2), oxidising agents (Class 5.1), organic peroxides (Class 5.2), toxic substances (Class 6.1), infectious substances (Class 6.2) or radioactive substances (Class 7). Exemptions may apply.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.



UN No: 1866
Dangerous Goods Class: 3
Packing Group: II

Proper Shipping Name: RESIN SOLUTION

AIR TRANSPORT

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



UN No: 1866
Dangerous Goods Class: 3
Packing Group: II

Proper Shipping Name: RESIN SOLUTION

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

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Basel Convention (Hazardous Waste)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): .

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| 16. OTHER INFORMATION |
|------------------------------|

Reason for issue: Revised

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.