



SAFETY DATA SHEET MICROFLOW 20 GLAZING PUTTY

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name MICROFLOW 20 GLAZING PUTTY

Product number MFG500

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Car maintenance product.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED
Bury
Lancashire
England
BL9 7NY

0161 764 5981
0161 797 5899
info@tetrosyl.com

Manufacturer TETROSYL LIMITED
Bury
Lancashire
England
BL9 7NY

0161 764 5981
0161 797 5899
info@tetrosyl.com

1.4. Emergency telephone number

Emergency telephone 0161 764 5981

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 1 - H372

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) T; R48/23/24/25. Xi; R36/38. Repr. Cat. 3 R63. R10

2.2. Label elements

MICROFLOW 20 GLAZING PUTTY

Pictogram



Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H361d Suspected of damaging the unborn child.
 H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P260 Do not breathe vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 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.
 P332+P313 If skin irritation occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

STYRENE

Supplementary precautionary statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P240 Ground/ bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P314 Get medical advice/ attention if you feel unwell.
 P321 Specific treatment (see medical advice on this label).
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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CALCIUM CARBONATE	30-60%
CAS number: 1317-65-3	
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -
STYRENE	10-30%
CAS number: 100-42-5 EC number: 202-851-5 REACH registration number: 01-2119457861-32-0017	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT RE 1 - H372	Classification (67/548/EEC or 1999/45/EC) R10 Xn;R20 Xi;R36/38
TITANIUM DIOXIDE	<1%
CAS number: 13463-67-7	
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) -
1-METHOXY-2-PROPANOL	<1%
CAS number: 107-98-2 EC number: 203-539-1	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336	Classification (67/548/EEC or 1999/45/EC) R10 R67

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from source of contamination. Effects may be delayed. Keep affected person under observation. Get medical attention. CAUTION! First aid personnel must be aware of own risk during rescue! Move affected person to fresh air at once. Keep affected person away from heat, sparks and flames. If breathing stops, provide artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel. Place unconscious person on their side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration.

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Ingestion	Get medical attention immediately. Rinse mouth thoroughly with water. Give plenty of water to drink. Give milk instead of water if readily available. Keep affected person under observation. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel. Never give anything by mouth to an unconscious person. Keep affected person away from heat, sparks and flames. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Rinse with water. Use suitable lotion to moisturise skin. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Do not rub eye. Get medical attention if any discomfort continues.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Effects may be delayed. Keep affected person under observation.
Inhalation	In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death. Vapours may cause headache, fatigue, dizziness and nausea. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication. May cause chemical burns in mouth and throat. Central nervous system depression. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritation, burning, lachrymation, blurred vision after liquid splash.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Foam, carbon dioxide or dry powder. Water. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. The product is highly flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

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Protective actions during firefighting Avoid breathing fire gases or vapours. Keep up-wind to avoid fumes. Risk of re-ignition after fire has been extinguished. Risk of explosion. Cool containers exposed to flames with water until well after the fire is out. Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.

Special protective equipment for firefighters Leave danger zone immediately.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Use suitable respiratory protection if ventilation is inadequate. Take precautionary measures against static discharges. No smoking, sparks, flames or other sources of ignition near spillage. Do not breathe vapour. Avoid contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up For waste disposal, see Section 13. Stop leak if possible without risk. Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Cover large spillages with alcohol-resistant foam.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Good personal hygiene procedures should be implemented. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Mechanical ventilation or local exhaust ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep containers upright. Keep only in the original container. Avoid contact with oxidising agents. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Oxidising materials.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits known for ingredient(s).

CALCIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

STYRENE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 430 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 1080 mg/m³

TITANIUM DIOXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

1-METHOXY-2-PROPANOL

Long-term exposure limit (8-hour TWA): WEL 100 ppm(Sk) 375 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 150 ppm(Sk) 560 mg/m³(Sk)

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Use explosion-proof general and local exhaust ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. All handling should only take place in well-ventilated areas.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Contaminated clothing should be placed in a closed container for disposal or decontamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type AX.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured paste.
Colour	Light (or pale). Green.
Odour	Characteristic.
pH	Not determined.
Melting point	Not determined.
Initial boiling point and range	145°C @ 1.013 hPa
Flash point	31°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Other flammability	Not determined.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.14g/cm ³ @ 20°C
Solubility(ies)	Insoluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	>1000 cP @ 20°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.

9.2. Other information

Other information	None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Vapours may form explosive mixtures with air.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not relevant.
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10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No information available.

Acute toxicity - inhalation

ATE inhalation (gases ppm) 26,560.9

ATE inhalation (vapours mg/l) 64.93

ATE inhalation (dusts/mists mg/l) 8.85

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. The product contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.

Inhalation

Vapours may irritate throat/respiratory system. Symptoms following overexposure may include the following: Headache. Dizziness. Drowsiness. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. The product contains organic solvents. Overexposure may depress the central nervous system, causing dizziness and intoxication.

Ingestion

May cause internal injury. May cause nausea, headache, dizziness and intoxication. Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact

Prolonged contact may cause dryness of the skin. Repeated exposure may cause skin dryness or cracking. Irritating to skin.

Eye contact

Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Route of entry

Inhalation Skin absorption Ingestion. Skin and/or eye contact

Medical symptoms

Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo.

Medical considerations

Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

SECTION 12: Ecological Information

Ecotoxicity

The product contains a substance which has a photochemical ozone creation potential.

12.1. Toxicity

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Acute toxicity - fish Not available.

Acute toxicity - aquatic invertebrates Not available.

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Adsorption/desorption coefficient Not available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

Disposal methods Confirm disposal procedures with environmental engineer and local regulations. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion. Reuse or recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS STYRENE, 1-METHOXY-2-PROPANOL)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS STYRENE, 1-METHOXY-2-PROPANOL)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS STYRENE, 1-METHOXY-2-PROPANOL)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS STYRENE, 1-METHOXY-2-PROPANOL)

14.3. Transport hazard class(es)

ADR/RID class 3

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ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 05/08/2016

MICROFLOW 20 GLAZING PUTTY

Revision	0
SDS number	32033
SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H372 Causes damage to organs (Hearing organs) through prolonged or repeated exposure.