

# Main Group

## SAFETY DATA SHEET FUSION 500

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

#### 1.1. Product identifier

Product name FUSION 500

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

Identified uses Thixotropic Acrylic Adhesive

#### 1.3. Details of the supplier of the safety data sheet

Supplier MAIN CHEMICAL CO. LTD  
P.O. Box 14  
Heckmondwike  
West Yorkshire  
WF16 0XQ  
  
Tel : +44 (0)1924 404006  
Fax : +44 (0)1924 400999  
Email : technical@mainchemicals.com

#### 1.4. Emergency telephone number

Emergency telephone Tel : +44 (0) 1924 404006 (Office Hours)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical hazards Not Classified  
Health hazards Skin Irrit. 2 - H315 Carc. 2 - H351  
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R20/21. Carc. Cat. 3;R40.

#### 2.2. Label elements

##### Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.  
H351 Suspected of causing cancer.

Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P501 Dispose of contents/ container in accordance with national regulations.

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### Contains

**Contains** DICHLOROMETHANE

**Supplementary precautionary statements** P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P264 Wash contaminated skin thoroughly after handling.  
 P308+P313 IF exposed or concerned: Get medical advice/ attention.  
 P321 Specific treatment (see medical advice on this label).  
 P332+P313 If skin irritation occurs: Get medical advice/ attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P405 Store locked up.

### 2.3. Other hazards

**Hazard id 2a**

**Hazard ID 2A**

**"Hazard ID 2A"**

**Hazard**

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>DICHLOROMETHANE</b>	<b>30-60%</b>
CAS number: 75-09-2	EC number: 200-838-9
<b>Classification</b> Carc. 2 - H351	<b>Classification (67/548/EEC or 1999/45/EC)</b> Carc. Cat. 3;R40
<b>XYLENE</b>	<b>10-30%</b>
CAS number: —	EC number: 215-535-7
	REACH registration number: 01-2119488216-XX
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315	<b>Classification (67/548/EEC or 1999/45/EC)</b> R10 Xn;R20/21 Xi;R38

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

**Ingredient notes** MIXTURE OF SUBSTANCES LISTED ABOVE WITH NON-HAZARDOUS ADDITIONS.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**Inhalation** Move affected person to fresh air at once. For breathing difficulties, oxygen may be necessary. Keep affected person warm and at rest. Get medical attention immediately.

**Ingestion** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

## FUSION 500

**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. Get medical attention immediately. Continue to rinse.

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

**Inhalation** Irritation of nose, throat and airway. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression. Inhalation of vapour or mist may cause lung oedema.

**Ingestion** Central nervous system depression. May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.

**Skin contact** Skin irritation. Prolonged contact may cause redness, irritation and dry skin.

**Eye contact** Irritation of eyes and mucous membranes. May cause severe eye irritation.

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

**Notes for the doctor** Symptomatic treatment. Adrenaline and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest. Gastric lavage may be effective when performed within 4 hours of ingestion.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Hydrogen chloride (HCl). Phosgene (COCl<sub>2</sub>). Oxides of the following substances: Carbon. 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

**Protective actions during firefighting** Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

## FUSION 500

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Usage precautions

Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation. Vapours may accumulate on the floor and in low-lying areas. Do not use in confined spaces without adequate ventilation and/or respirator. Avoid heat, flames and other sources of ignition. Storage tanks and other containers must be earthed.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Storage precautions

Keep away from heat, sparks and open flame. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

#### 7.3. Specific end use(s)

##### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

Sk

##### DICHLOROMETHANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 300 ppm 1060 mg/m<sup>3</sup>

Sk

##### XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit  
Sk = Can be absorbed through skin.

#### DICHLOROMETHANE (CAS: 75-09-2)

##### DNEL

Industry - Inhalation; Short term local effects: 706 mg/m<sup>3</sup>  
Industry - Dermal; Long term local effects: 4750 mg/kg/day  
Industry - Inhalation; Long term local effects: 353 mg/m<sup>3</sup>  
Consumer - Inhalation; Short term local effects: 353 mg/m<sup>3</sup>  
Consumer - Dermal; Long term local effects: 2395 mg/kg/day  
Consumer - Dermal; Long term local effects: 88.3 mg/m<sup>3</sup>  
Consumer - Oral; Long term local effects: 0.06 mg/kg/day  
Consumer - Oral; Short term local effects: 0.06 mg/kg/day  
Consumer - Inhalation; Short term systemic effects: 353 mg/m<sup>3</sup>

##### PNEC

- Fresh water; 0.54 mg/l  
- marine water; 0.194 mg/l  
- Sediment (Freshwater); 0.972 mg/kg  
- Soil; 0.583 mg/kg  
7-8 - STP; 26 mg/l  
- Sediment (Marinewater); 0.349 mg/kg  
- Intermittent release; 26 mg/l

#### XYLENE

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### DNEL

Consumer - Dermal; Long term systemic effects: 108 mg/kg/day  
 Industry - Dermal; Long term systemic effects: 180 mg/kg/day  
 Consumer - Inhalation; Short term local effects: 174 mg/m<sup>3</sup>  
 Consumer - Inhalation; Short term systemic effects: 174 mg/m<sup>3</sup>  
 Industry - Inhalation; Short term systemic effects: 289 mg/m<sup>3</sup>  
 Industry - Inhalation; Short term local effects: 289 mg/m<sup>3</sup>  
 Consumer - Inhalation; Long term systemic effects: 14.8 mg/m<sup>3</sup>  
 Industry - Inhalation; Long term systemic effects: 77 mg/m<sup>3</sup>

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

#### Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Viton rubber (fluoro rubber). 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.

#### Other skin and body protection

Wear rubber apron. Wear rubber footwear.

#### Hygiene measures

Provide eyewash station and safety shower. Wash contaminated clothing before reuse. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. Eating, smoking and water fountains prohibited in immediate work area.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Clear liquid.
Odour	Chlorinated
Melting point	<0°C
Initial boiling point and range	39°C
Flash point	Not applicable.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.8 Upper flammable/explosive limit: 66.4
Relative density	1.174 @ 25°C
Solubility(ies)	Insoluble in water. Soluble in most organic solvents.
Auto-ignition temperature	>400°C

### 9.2. Other information

## FUSION 500

**Other information** Not determined.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** The following materials may react with the product: Strong alkalis. Oxidising materials. Forms a detonable mixture with Nitric acid. In contact with some metals can generate hydrogen gas, which can form explosive mixtures with air.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Forms a detonable mixture with Nitric acid. Will not polymerise.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

#### 10.5. Incompatible materials

**Materials to avoid** Strong alkalis. Strong oxidising agents. Amines. Water, steam, water mixtures. Zinc. Aluminium. Magnesium. Potassium. Sodium.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Hydrogen chloride (HCl). Phosgene (COCl<sub>2</sub>). Oxides of the following substances: Carbon monoxide (CO). Chlorine.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - dermal

**ATE dermal (mg/kg)** 6,204.17

##### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 25,380.71

**ATE inhalation (vapours mg/l)** 62.04

**ATE inhalation (dusts/mists mg/l)** 8.46

**Inhalation** Irritating to respiratory system. Vapours irritate the respiratory system. May cause coughing and difficulties in breathing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

**Ingestion** Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

**Skin contact** Prolonged contact may cause redness, irritation and dry skin. Irritating to skin.

**Eye contact** A single exposure may cause the following adverse effects: Corneal damage. Irritation of eyes and mucous membranes.

**Acute and chronic health hazards** Known or suspected carcinogen for humans.

**Target organs** Eyes Skin Respiratory system, lungs Heart & cardiovascular system Kidneys Liver Central nervous system

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### SECTION 12: Ecological information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

#### 12.1. Toxicity

#### 12.2. Persistence and degradability

**Persistence and degradability** The product is slowly degradable.

**Biodegradation** - Degradation (%) 66: 50 hours  
Water - DT<sub>50</sub> : 14.2 days

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** BCF: < 0.91 - 40,

#### 12.4. Mobility in soil

**Mobility** The product is miscible with water and may spread in water systems.

**Henry's law constant** 0.0398 Pa m<sup>3</sup>/mol @ °C

#### 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 determined.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** Do not puncture or incinerate, even when empty. 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. Empty Container Warning (where applicable): Empty containers may retain residue and can be dangerous. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSURE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### SECTION 14: Transport information

#### 14.1. UN number

**UN No. (ADR/RID)** 1593

**UN No. (IMDG)** 1593

**UN No. (ICAO)** 1593

**UN No. (ADN)** 1593

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** DICHLOROMETHANE

**Proper shipping name (IMDG)** DICHLOROMETHANE

**Proper shipping name (ICAO)** DICHLOROMETHANE

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Proper shipping name (ADN) DICHLOROMETHANE

### 14.3. Transport hazard class(es)

ADR/RID class	6.1
ADR/RID classification code	T1
ADR/RID label	6.1
IMDG class	6.1
ICAO class/division	6.1
ADN class	6.1

### Transport labels



### 14.4. Packing group

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

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant  
No.

### 14.6. Special precautions for user

EmS	F-A, S-A
ADR transport category	2
Emergency Action Code	2Z
Hazard Identification Number (ADR/RID)	60
Tunnel restriction code	(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

<b>EU legislation</b>	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).
<b>Guidance</b>	Approved Classification and Labelling Guide (Sixth edition) L131.

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.



## FUSION 500

### SECTION 16: Other information

<b>General information</b>	Quality Assurance: Main Chemical Co Ltd, Conforms to ISO 9001 : 2015 Cert No. 14130770  Environmental Standard: Main Chemical Co Ltd, Conforms to ISO 14001 : 2015 Cert No. 14124143
<b>Revision date</b>	19/08/2014
<b>Revision</b>	06/01/2016
<b>Supersedes date</b>	29/11/2018
<b>SDS number</b>	10540
<b>Risk phrases in full</b>	R10 Flammable. R20/21 Harmful by inhalation and in contact with skin. R38 Irritating to skin. R40 Limited evidence of a carcinogenic effect.
<b>Hazard statements in full</b>	H226 Flammable liquid and vapour. H312 Harmful in contact with skin. H315 Causes skin irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. Uses Advised Against: The product should not be used for any other purpose other than its intended use. Handling, storage and conditions to avoid instructions must be followed at all times.