

# **ITW** Engineered Polymers

## SAFETY DATA SHEET MA422 ADHESIVE

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

#### 1.1. Product identifier

Product name MA422 ADHESIVE

Product number Z0005

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

Identified uses Adhesive.

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

Supplier ITW Engineered Polymers  
Bay 150  
Shannon Industrial Estate  
Shannon  
Co. Clare

+353 (0)61 471 299

+353 (0)61 471 285

mail@itwep.com

#### 1.4. Emergency telephone number

Emergency telephone +44(0)1235 239 670 (24h)

### SECTION 2: Hazards identification

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

##### Classification

Physical hazards Flam. Liq. 2 - H225

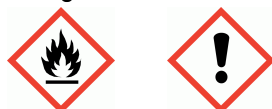
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xi;R36/37/38. R43. F;R11.

#### 2.2. Label elements

##### Pictogram



##### Signal word

Danger

##### Hazard statements

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.

## MA422 ADHESIVE

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing vapour/spray.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/attention.</p>
<b>Contains</b>	METHYL METHACRYLATE, METHACRYLIC ACID
<b>Supplementary precautionary statements</b>	<p>P240 Ground/bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P312 Call a POISON CENTER/doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/container in accordance with national regulations.</p>

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>METHYL METHACRYLATE</b>	<b>30-60%</b>
CAS number: 80-62-6	EC number: 201-297-1
	REACH registration number: 01-2119452498-28-0000
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Flam. Liq. 2 - H225	F;R11 R43 Xi;R37/38
Skin Irrit. 2 - H315	
Skin Sens. 1 - H317	
STOT SE 3 - H335	

**MA422 ADHESIVE**

<b>METHACRYLIC ACID</b>		<b>1-5%</b>
CAS number: 79-41-4	EC number: 201-204-4	REACH registration number: 01-2119463884-26-0000
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Acute Tox. 4 - H302	C;R35 Xn;R21/22	
Acute Tox. 4 - H312		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		

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**

<b>General information</b>	Avoid contact with skin and eyes. Do not breathe vapour/spray. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>Inhalation</b>	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. Give plenty of water to drink. Get medical attention.
<b>Skin contact</b>	Remove affected person from source of contamination. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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**4.3. Indication of any immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	No specific recommendations. If in doubt, get medical attention promptly.
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**SECTION 5: Firefighting measures****5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide or dry powder.
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**5.2. Special hazards arising from the substance or mixture**

<b>Specific hazards</b>	Highly flammable. Avoid breathing fire gases or vapours. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Polymerises easily with evolution of heat.
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**5.3. Advice for firefighters**

<b>Protective actions during firefighting</b>	Keep up-wind to avoid fumes. Do not use water jet as an extinguisher, as this will spread the fire. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.
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<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

## MA422 ADHESIVE

**Personal precautions** Warn everybody of potential hazards and evacuate if necessary. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of spray mist and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses. 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 non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

### 6.4. Reference to other sections

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Use only in well-ventilated areas. Avoid contact with skin and eyes. Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Take precautionary measures against static discharges. Storage tanks and other containers must be earthed. Do not eat, drink or smoke when using the product. No smoking, sparks, flames or other sources of ignition near spillage. Good personal hygiene procedures should be implemented.

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

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

### 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

#### **METHYL METHACRYLATE**

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m<sup>3</sup>

#### **METHACRYLIC ACID**

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 40 ppm 143 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

### 8.2. Exposure controls

## MA422 ADHESIVE

### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

#### Hand protection

Wear protective gloves made of the following material: Rubber or plastic.

#### Other skin and body protection

Wear apron or protective clothing in case of contact.

#### Hygiene measures

Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving workplace.

#### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

### SECTION 9: Physical and Chemical Properties

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

Appearance	Paste.
Colour	White/off-white.
Odour	Slight pungent.
pH	pH (concentrated solution): <7 @ 20 °C
Melting point	-47.7°C
Initial boiling point and range	101°C @
Flash point	10°C
Evaporation rate	3 (butyl acetate =1)
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.7 Upper flammable/explosive limit: 12.5
Vapour pressure	28mm Hg @ °C
Vapour density	>1
Relative density	0.93 - 1.05 @ @ 20 °C°C

#### 9.2. Other information

Other information	Not available.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

##### Reactivity

The following materials may react with the product: Strong oxidising agents. Strong reducing agents. Alkalis.

#### 10.2. Chemical stability

## MA422 ADHESIVE

**Stability** May polymerise.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** May polymerise.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods of time. Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with the following materials: Oxidising agents. Reducing agents. Alkalis - inorganic. Alkalis - organic.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** 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

#### Acute toxicity - oral

**ATE oral (mg/kg)** 10,020.04

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 22,044.09

**Inhalation** Irritating to respiratory system. Vapours in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

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

**Skin contact** May be absorbed through the skin. Irritating to skin. May cause sensitisation by skin contact. Prolonged contact may cause redness, irritation and dry skin. May cause sensitisation or allergic reactions in sensitive individuals.

**Eye contact** Irritating to eyes. A single exposure may cause the following adverse effects: Corneal damage.

**Target organs** Prolonged or repeated exposure may cause the following adverse effects: May cause damage to the liver and kidneys. Respiratory system, lungs Central nervous system May cause an asthma-like shortness of breath.

## SECTION 12: Ecological Information

**Ecotoxicity** Avoid releasing into the environment.

### 12.1. Toxicity

**Toxicity** Not considered toxic to fish.

### 12.2. Persistence and degradability

**Persistence and degradability** Methyl methacrylate monomer : Biochemical oxygen demand within 5 days (BOD5) = .14 g/g - 0.9 g/g.

## MA422 ADHESIVE

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Methyl methacrylate monomer: LC50/96h/fathead minnows = 150 ppm, LC50/96h/bluegill sunfish = 232ppm. Methyl methacrylate monomer: LC50/96h/rainbow trout = >79mg/l

### 12.4. Mobility in soil

**Mobility** Avoid or minimise the creation of any environmental contamination. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

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

**Waste class** 08 04 09

## SECTION 14: Transport information

**General** No other information known.

### 14.1. UN number

**UN No. (ADR/RID)** 1133

**UN No. (IMDG)** 1133

**UN No. (ICAO)** 1133

### 14.2. UN proper shipping name

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

**Proper shipping name (IMDG)** Adhesives

**Proper shipping name (ICAO)** Adhesives

**Proper shipping name (ADN)** Adhesives

### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID label** 3

**IMDG class** 3

**ICAO class/division** 3

**Transport labels**

### 14.4. Packing group

## MA422 ADHESIVE

<b>ADR/RID packing group</b>	II
<b>IMDG packing group</b>	II
<b>ICAO packing group</b>	II

### 14.5. Environmental hazards

#### **Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

No information required.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information required.

## SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

**Water hazard classification** WGK 1

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Revision date</b>	28/04/2015
<b>Revision</b>	12
<b>Supersedes date</b>	05/12/2014
<b>Risk phrases in full</b>	R11 Highly flammable. R21/22 Harmful in contact with skin and if swallowed. R35 Causes severe burns. R36/37/38 Irritating to eyes, respiratory system and skin. R37 Irritating to respiratory system. R37/38 Irritating to respiratory system and skin. R43 May cause sensitisation by skin contact.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation.



## MA422 ADHESIVE

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.