# **ITW** Engineered Polymers

# SAFETY DATA SHEET MA420 ADHESIVE

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

1.1. Product identifier

Product name MA420 ADHESIVE

Product number Z0009

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 (EC 1272/2008)

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 Xi;R37. R43. F;R11.

1999/45/EC)

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.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P261 Avoid breathing vapour/ spray.

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.

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.

Contains METHYL METHACRYLATE, METHACRYLIC ACID

Supplementary precautionary statements

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. P264 Wash contaminated 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.

P302+P352 IF ON SKIN: Wash with plenty of water.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P333+P313 If skin irritation or rash 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.

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

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.

P501 Dispose of contents/ container in accordance with national regulations.

# 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

METHYL METHACRYLATE 60-100%

CAS number: 80-62-6 EC number: 201-297-1 REACH registration number: 01-

2119452498-28-0000

Classification Classification (67/548/EEC or 1999/45/EC)

Flam. Liq. 2 - H225 F;R11 R43 Xi;R37/38

Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335

METHACRYLIC ACID 5-10%

CAS number: 79-41-4 EC number: 201-204-4 REACH registration number: 01-

2119463884-26-0000

Classification Classification (67/548/EEC or 1999/45/EC)

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

General information Do not breathe vapour/spray. Avoid contact with skin and eyes. In case of accident or if you

feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation** Move affected person to fresh air at once. Get medical attention if any discomfort continues.

**Ingestion** Do not induce vomiting. Give plenty of water to drink. Get medical attention.

Skin contact Remove affected person from source of contamination. Wash skin thoroughly with soap and

water. Get medical attention if irritation persists after washing.

**Eye contact** Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

minutes and get medical attention. Get medical attention if irritation persists after washing.

# 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.

# 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.

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with foam, carbon dioxide or dry powder.

# 5.2. Special hazards arising from the substance or mixture

Specific hazards 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.

#### 5.3. Advice for firefighters

Protective actions during

firefighting

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.

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

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. Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Do not breathe vapour. Avoid contact with skin and eyes. Take precautionary measures against static discharges. Storage tanks and other containers must be earthed. No smoking, sparks, flames or other sources of ignition near spillage. Do not eat, drink or smoke when using the product. 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. Store away from incompatible materials (see Section 10).

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/m³ Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³

# METHACRYLIC ACID

Long-term exposure limit (8-hour TWA): WEL 20 ppm  $72 \text{ mg/m}^3$  Short-term exposure limit (15-minute): WEL 40 ppm  $143 \text{ mg/m}^3$ 

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

# 8.2. Exposure controls

#### Protective equipment











Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

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. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves made of the following material: Rubber or plastic. The selected gloves should have a breakthrough time of at least 8 hours. To protect hands from chemicals, gloves should comply with European Standard EN374.

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. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

#### 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 (concentrated solution): 6 > 7 @ 20oC

Melting point  $-47.7^{\circ}$ C Initial boiling point and range  $101^{\circ}$ C @ Flash point  $10^{\circ}$ C

**Evaporation rate** 3 (butyl acetate =1)

Upper/lower flammability or explosive limits

Upper flammable/explosive limit: 12.5 Lower flammable/explosive limit: 1.7

Relative density 0.96 @ 25 °C °C

**Viscosity** 100,000-125,000 cP @ 25°C

9.2. Other information

Other information Not available.

Revision date: 12/06/2017 Revision: 26 Supersedes date: 02/11/2015

#### MA420 ADHESIVE

#### SECTION 10: Stability and reactivity

10.1. Reactivity

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

agents. Strong alkalis.

10.2. Chemical stability

**Stability** May polymerise.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

May polymerise.

10.4. Conditions to avoid

**Conditions to avoid** Heating may generate flammable vapours. Vapours may form explosive mixtures with air.

Avoid heat, flames and other sources of ignition. Avoid excessive heat for prolonged periods

of time.

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) 100,000.0

Acute toxicity - dermal

ATE dermal (mg/kg) 220,000.0

**Inhalation** Vapours have a narcotic effect. 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** Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal

tract. Irritating. Symptoms following overexposure may include the following: Nausea,

vomiting. Stomach pain.

**Skin contact** May be absorbed through the skin. Irritating to skin. Prolonged and frequent contact may

cause redness and irritation. May cause sensitisation by skin contact. 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 Prolonged or repeated exposure may cause the following adverse effects: May cause an asthma-like

shortness of breath.

#### SECTION 12: Ecological Information

**Ecotoxicity** Avoid release to 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.

#### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

**Mobility** Do not discharge into drains or watercourses or onto the ground.

#### 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

**ADHESIVES** 

(ADR/RID)

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

ADR/RID packing group II
IMDG packing group II
ICAO packing group II

# 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

EmS F-E, S-D

Emergency Action Code •3YE

Hazard Identification Number

(ADR/RID)

Tunnel restriction code (D/E)

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

33

Transport in bulk according to No information required.

Annex II of MARPOL 73/78

and the IBC Code

# **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).

Guidance This product is not considered to be corrosive to the skin in vivo according to EU Directive

67/548 EEC as amended.

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

Revision date 12/06/2017

Revision 26

Supersedes date 02/11/2015

Risk phrases in full R11 Highly flammable.

R21/22 Harmful in contact with skin and if swallowed.

R35 Causes severe burns.

R37 Irritating to respiratory system.

R37/38 Irritating to respiratory system and skin. R43 May cause sensitisation by skin contact.

Hazard statements in full 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.

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.