

Engineered Polymers

SAFETY DATA SHEET MA320 ADHESIVE.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name MA320 ADHESIVE.
Product No. Z0001

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

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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; STOT SE 3 - H335
Environment	Not classified.

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

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

2.2. Label elements

Contains METHYL METHACRYLATE
Label In Accordance With (EC) No. 1272/2008



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.

Supplementary Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
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P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... 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/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	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 or doctor/physician if you feel unwell.
P313	Get medical advice/attention.
P321	Specific treatment (see ... on this label).
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337	If eye irritation persists:
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370+378	In case of fire: Use ... for extinction.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to ...

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHACRYLIC ACID		1-5%
CAS-No.: 79-41-4		EC No.: 201-204-4
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Acute Tox. 4 - H302	C;R35	
Acute Tox. 4 - H312	Xn;R21/22	
Skin Corr. 1A - H314		
STOT SE 3 - H335		
METHYL METHACRYLATE		60-100%
CAS-No.: 80-62-6		EC No.: 201-297-1
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 2 - H225	F;R11	
Skin Irrit. 2 - H315	R43	
Skin Sens. 1 - H317	Xi;R37/38	
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 label where possible).

Inhalation

Move the exposed person to fresh air at once. Contact physician if discomfort continues.

Ingestion

Do not induce vomiting. Drink plenty of water. Get medical attention.

Skin contact

Remove affected person from source of contamination. Wash skin thoroughly with soap and water for several minutes. Contact physician if irritation persists.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Contact physician if irritation persists.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation

Irritation of nose, throat and airway.

Ingestion

May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact

Mild dermatitis, allergic skin rash. Prolonged skin contact may cause redness and irritation.

Eye contact

Irritation of eyes and mucous membranes.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

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 vapours. May travel considerable distance to source of ignition and flash back. Polymerises generating heat.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Warn everybody of potential hazards and evacuate if necessary. Remove sources of ignition. 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

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

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6.3. Methods and material for containment and cleaning up

Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. 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

Use only in well-ventilated areas. Avoid contact with skin and eyes. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Take precautionary measures against static discharges. Storage tanks and other containers must be grounded. Do not smoke, use open fire or other sources of ignition. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

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)

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
METHACRYLIC ACID	WEL	20 ppm	72 mg/m3	40 ppm	143 mg/m3	
METHYL METHACRYLATE	WEL	50 ppm	208 mg/m3	100 ppm	416 mg/m3	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Use protective gloves made of: Rubber or plastic.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

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Hygiene measures

Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Change work clothing daily before leaving work place.

Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	White / off-white.
Odour	Slightly pungent odour.
Initial boiling point and boiling range (°C)	101
Melting point (°C)	-47.7
Relative density	0.93 - 1.05 @ 20 °C
Vapour density (air=1)	>1
Vapour pressure	28mmHg 20
Evaporation rate	3 (butyl acetate=1)
pH-Value, Conc. Solution	7 @ 20 °C
Viscosity	135, 000-175, 000 cP 25
Flash point (°C)	10
Flammability Limit - Lower(%)	1.7
Flammability Limit - Upper(%)	12.5

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Strong oxidising agents. Strong reducing agents.

10.2. Chemical stability

May polymerise.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

May polymerise.

10.4. Conditions to avoid

Heating will generate vapours which may form explosive vapour/air mixtures. 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 oxidisers or reducing agents. Bases, alkalis (inorganic). Bases, alkalis (organic).

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50

>2, 000 mg/kg (oral rat)

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Inhalation

Vapours may cause headache, fatigue, dizziness and nausea. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion

Irritating. May cause nausea, stomach pain and vomiting.

Skin contact

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

Eye contact

Irritating to eyes. Risk of corneal damage.

Target Organs

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

Toxicological information on ingredients.

METHYL METHACRYLATE (CAS: 80-62-6)

Toxic Dose 1 - LD 50

7872 mg/kg (oral rat)

Toxic Conc. - LC 50

7093 ppm/4h (inh-rat)

METHACRYLIC ACID (CAS: 79-41-4)

Toxic Dose 1 - LD 50

1060 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Avoid release to the environment.

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Degradability

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

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:

Do not discharge into drains, water courses or onto the ground.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

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Waste Class

08 04 09

SECTION 14: TRANSPORT INFORMATION

General No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 1133

UN No. (IMDG) 1133

UN No. (ICAO) 1133

14.2. UN proper shipping name

Proper Shipping Name ADHESIVES

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

ADR/RID/ADN Class Class 3: Flammable liquids.

ADR Label No. 3

IMDG Class 3

ICAO Class/Division 3

Transport Labels



14.4. Packing group

ADR/RID/ADN 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 No. (ADR) 33

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

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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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	11/02/2015
Revision	10
Supersedes date	27/11/2014
Date	27-11-14
Risk Phrases In Full	
R35	Causes severe burns.
R21/22	Harmful in contact with skin and if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R37	Irritating to respiratory system.
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.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Disclaimer

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.