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

1.1. Product identifier

Product name: MA8110/8120 Adhesive

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 Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.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 Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards: Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram

Signal word: Danger

Hazard statements:
H225 Highly flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.
MA8110/8120 Adhesive

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

METHYL METHACRYLATE, METHACRYLIC ACID, MALEIC ACID, DODECYL METHACRYLATE, 2-PROPENOIC ACID,2-METHYL-2-HYDROXYETHYL ESTER, PHOSPHATE

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.
P260 Do not breathe vapour/ spray.
P261 Avoid breathing vapour/ spray.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P301+P330+P313 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
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.
P310 Immediately call a POISON CENTER/ doctor.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P313 Specific treatment (see medical advice on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>METHYL METHACRYLATE</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 80-62-6</td>
<td>EC number: 201-297-1</td>
</tr>
<tr>
<td></td>
<td>REACH registration number: 01-2119452498-28-0000</td>
</tr>
</tbody>
</table>

Classification

Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
STOT SE 3 - H335
### MA8110/8120 Adhesive

#### METHACRYLIC ACID
- **CAS number**: 79-41-4
- **EC number**: 201-204-4
- **REACH registration number**: 01-2119463884-26-0000
- **1-5%**

**Classification**
- Acute Tox. 4 - H302
- Acute Tox. 4 - H312
- Skin Corr. 1A - H314
- Eye Dam. 1 - H318
- STOT SE 3 - H335

#### DODECYL METHACRYLATE
- **CAS number**: 142-90-5
- **EC number**: 205-570-6
- **M factor (Acute)** = 1
- **M factor (Chronic)** = 1
- **1-5%**

**Classification**
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319
- STOT SE 3 - H335
- Aquatic Acute 1 - H400
- Aquatic Chronic 1 - H410

#### tert-butyl perbenzoate
- **CAS number**: 614-45-9

**Classification**
- Org. Perox. C - H242
- Aquatic Chronic 2 - H411
- **1-5%**

#### 2-PROPENOIC ACID,2-METHYL-2-HYDROXYETHYL ESTER, PHOSPHATE
- **CAS number**: 52628-03-2
- **EC number**: 258-053-2

**Classification**
- Skin Corr. 1B - H314
- Eye Dam. 1 - H318
- Skin Sens. 1A - H317
- **1-5%**

#### MALEIC ACID
- **CAS number**: 110-16-7
- **EC number**: 203-742-5

**Classification**
- Acute Tox. 4 - H302
- Skin Irrit. 2 - H315
- Eye Irrit. 2 - H319
- Skin Sens. 1 - H317
- STOT SE 3 - H335
- **1-5%**

The full text for all hazard statements is displayed in Section 16.
MA8110/8120 Adhesive

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.

Ingestion
IF SWALLOWED: Do not induce vomiting. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person.

Skin contact
IF ON SKIN: Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes and get medical attention.

Eye contact
IF IN EYES: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring these instructions.

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

Inhalation
May cause respiratory system irritation. Overexposure may cause the following adverse effects: May cause drowsiness or dizziness.

Ingestion
Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. May cause chemical burns in mouth and throat.

Skin contact
Prolonged contact may cause redness, irritation and dry skin. May cause an allergic skin reaction.

Eye contact
Severe irritation, burning, tearing and blurred vision. Overexposure may cause the following adverse effects: Corneal damage.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media
Do not use water, if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

5.3. Advice for firefighters

Protective actions during firefighting
Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimise risk of rupture. Do not enter storage areas or confined spaces unless adequately ventilated. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Control run-off water by containing and keeping it out of sewers and watercourses.

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

5.4. Special protective equipment for firefighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate area of unprotected personnel.

6.2. Environmental precautions

Environmental precautions
Control run-off water by containing and keeping it out of sewers and watercourses.
MA8110/8120 Adhesive

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. Provide ventilation and confine spill. Do not allow runoff to sewer. Wash thoroughly after dealing with a spillage. Eliminate all ignition sources if safe to do so.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Do not reuse containers without proper cleaning or reconditioning.

Advice on general occupational hygiene Wash skin thoroughly after handling.

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. 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 mg/m³
Short-term exposure limit (15-minute): WEL 40 ppm 143 mg/m³

WEL = Workplace Exposure Limit

8.2. Exposure controls

Protective equipment

Eye/face protection Wear eye protection. Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection Wear protective gloves. It is recommended that chemical-resistant, impervious gloves are worn. To protect hands from chemicals, gloves should comply with European Standard EN374. The breakthrough time for any glove material may be different for different glove manufacturers. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection Wear apron or protective clothing in case of contact.
Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Gas and combination filter cartridges should comply with European Standard EN14387.

### SECTION 9: Physical and Chemical Properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Paste</td>
</tr>
<tr>
<td>Colour</td>
<td>White/off-white</td>
</tr>
<tr>
<td>pH</td>
<td>pH (concentrated solution): 5</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>100.5°C @</td>
</tr>
<tr>
<td>Flash point</td>
<td>10°C TCC (Tag closed cup)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>3</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>: 2.1%-12.5%</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>28 mm Hg @ 68°F</td>
</tr>
<tr>
<td>Vapour density</td>
<td>&gt; 1</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity: See Section 10.3 (Possibility of hazardous reactions) for further information.

#### 10.2. Chemical stability

Stability: Unstable.

#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: May polymerise.

#### 10.4. Conditions to avoid

Conditions to avoid: Extreme heat, sparks and open flame. Incompatible materials, oxidisers and oxidising conditions.

#### 10.5. Incompatible materials

Materials to avoid: Oxidising agents (such as peroxides), reducing agents, acids, bases, azo-compounds, catalytic metals (such as copper, iron), halogens. Free radical initiators. Oxygen scavengers.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products: Vapours may be ignited by a spark, a hot surface or an ember.

### SECTION 11: Toxicological information
MA8110/8120 Adhesive

11.1. Information on toxicological effects

Acute toxicity - oral
ATE oral (mg/kg) 100,000.0

Acute toxicity - dermal
ATE dermal (mg/kg) 440,000.0

Inhalation: May cause eye and respiratory system irritation. Prolonged or repeated exposure to vapours in high concentrations may cause the following adverse effects: May cause drowsiness or dizziness.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Skin contact: Prolonged or repeated exposure may cause severe irritation. May cause an allergic skin reaction.

Eye contact: Causes serious eye irritation. Prolonged or repeated exposure may cause the following adverse effects: Corneal damage.

Target organs: Eyes Skin Respiratory system, lungs DIGESTIVE SYSTEM. Liver Kidneys

STYRENE-BUTADIENE BLOCK COPOLYMER

Carcinogenicity
IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological Information

Ecotoxicity: Dangerous for the environment. Dangerous for the environment if discharged into watercourses.

12.1. Toxicity
12.2. Persistence and degradability
12.3. Bioaccumulative potential
12.4. Mobility In soil
12.5. Results of PBT and vPvB assessment
12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information: The generation of waste should be minimised or avoided wherever possible. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Dispose of waste product or used containers in accordance with local regulations.

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

14.1. UN number
UN No. (ADR/RID) 1133
MA8110/8120 Adhesive

UN No. (IMDG)  1133
UN No. (ICAO)  1133
UN No. (ADN)  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 classification code  F1
ADR/RID label  3
IMDG class  3
ICAO class/division  3
ADN class  3

14.4. Packing group
ADR/RID packing group  II
IMDG packing group  II
ADN 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
ADR transport category  2
Emergency Action Code  •3YE
Hazard Identification Number (ADR/RID)  33
Tunnel restriction code (D/E)

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
**MA8110/8120 Adhesive**

**EU legislation**


**15.2. Chemical safety assessment**

<table>
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<th>Revision date</th>
<th>05/04/2018</th>
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<tbody>
<tr>
<td>Revision</td>
<td>1</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>26/08/2016</td>
</tr>
<tr>
<td>SDS number</td>
<td>20773</td>
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**Hazard statements in full**

- H225 Highly flammable liquid and vapour.
- H242 Heating may cause a fire.
- 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.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

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.