SAFETY DATA SHEET
MA590 ACTIVATOR

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

1.1. Product identifier

Product name MA590 ACTIVATOR
Product number Z0089

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

Identified uses Activator.

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@itwp.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 Skin Sens. 1 - H317 STOT SE 3 - H335

Environmental hazards Not Classified

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.
H335 May cause respiratory irritation.
MA590 ACTIVATOR

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.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with national regulations.

Contains

METHYL METHACRYLATE

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.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
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.

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

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

Classification

Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
STOT SE 3 - H335

<table>
<thead>
<tr>
<th>PDHP</th>
<th>5-10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 34562-31-7</td>
<td></td>
</tr>
<tr>
<td>EC number: 252-091-3</td>
<td></td>
</tr>
</tbody>
</table>

Classification

Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319

The full text for all hazard statements is displayed in Section 16.
MA590 ACTIVATOR

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
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).

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. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Avoid inhalation of spray mist and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses.

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
MA590 ACTIVATOR

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  Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. 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
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. 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. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. 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. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection  Wear chemical protective suit.

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.
MA590 ACTIVATOR

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.
Odour Slight pungent.
\( \text{pH} \) \( \text{pH (concentrated solution): 4.5-5.5 @ 20 \, ^\circ\text{C} } \)
Melting point N/D°C
Initial boiling point and range 100°C @
Flash point 10.6°C
Upper/lower flammability or explosive limits Upper flammable/explosive limit: 12.5 Lower flammable/explosive limit: 2.1
Vapour pressure 28mmHg @ °C
Relative density .96 @ 20 °C°C

9.2. Other information

Other information Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Strong oxidising agents.

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 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. Heating may generate flammable vapours. Vapours may form explosive mixtures with air.

10.5. Incompatible materials

Materials to avoid Avoid contact with oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
MA590 ACTIVATOR

Acute toxicity - oral
ATE oral (mg/kg)  500,501.0

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

Ingestion  Irritating. Symptoms following overexposure may include the following: Nausea, vomiting. Stomach pain.

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

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

PDHP

Acute toxicity - oral
ATE oral (mg/kg)  500.0

SECTION 12: Ecological Information

Ecotoxicity  Avoid release to the environment.

12.1. 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
# MA590 ACTIVATOR

## SECTION 14: Transport information

### General
No other information known.

### 14.1. UN number

<table>
<thead>
<tr>
<th>UN No. (ADR/RID)</th>
<th>1133</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No. (IMDG)</td>
<td>1133</td>
</tr>
<tr>
<td>UN No. (ICAO)</td>
<td>1133</td>
</tr>
</tbody>
</table>

### 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

![Flammable Symbol]

### 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)**: 33

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

- No information required.

## SECTION 15: Regulatory information
MA590 ACTIVATOR

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

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

<table>
<thead>
<tr>
<th>General information</th>
<th>Only trained personnel should use this material.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date</td>
<td>05/04/2018</td>
</tr>
<tr>
<td>Revision</td>
<td>16</td>
</tr>
<tr>
<td>Supersedes date</td>
<td>04/08/2017</td>
</tr>
</tbody>
</table>

Hazard statements in full
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
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.