

SAFETY DATA SHEET**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

Product name: **ZIP PATCH ADHESIVE.**

Supplier: ITW Devcon
Shannon Industrial Estate
Co. Clare, Ireland.

Brunel Close, Park Farm Ind. Est.,
Wellingborough, Northants NN8
6QX

Emergency telephone number: 353(61)471299 Business Hours: 01933 675299
8:00am - 5:00pm

Fax No: 353(61)471285 01933 670800

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation Formulated product.

| Chemical Name | CAS-No | EEC-No | Class | Weight % |
|---------------------|---------|--------------|-----------------------|----------|
| METHYL METHACRYLATE | 80-62-6 | 607-035-00-6 | F; R11 Xi; R37/38 R43 | 40-70 |
| METHACRYLIC ACID | 79-41-4 | 607-088-00-5 | Xn; R21/22 C; R35 | 1-10 |

3. HAZARDS IDENTIFICATION

Most important hazards: Highly flammable, Irritating to respiratory system and skin, irritation of mucous membranes.

Specific hazards Inhalation of high vapour concentrations can cause CNS-depression and narcosis, May cause sensitization by skin contact
Code no.: 4-5 (1993)

4. FIRST AID MEASURES

General advice: Avoid contact with skin and eyes. Avoid breathing vapours or spray mist.

Inhalation: Move to fresh air, Consult a physician after significant exposure.

Skin contact: Remove immediately adhering matter, Wash off immediately with soap and plenty of water, If skin irritation persists, call a physician.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician,

Ingestion: Do not induce vomiting, Drink plenty of water, Call a physician immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: foam, Carbon Dioxide (CO₂), dry chemical

Extinguishing media which must not be used for safety reasons:
Do not use a solid water stream as it may scatter and spread fire

Specific hazards: In case of fire and/or explosion do not breathe fumes, Flash back possible over considerable distance, Polymerization can occur. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers

Special protective equipment for firefighters: Cool containers / tanks with water spray, If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated, In case of fire, wear a self contained breathing apparatus

Specific methods: Standard procedure for chemical fires

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes, Use personal protective equipment, Ensure adequate ventilation. Remove all sources of ignition,

Environmental precautions: Avoid subsoil penetration, Do not let product enter drains,

Methods for cleaning up: Dam up, Scrape up, Soak up with inert absorbent material,

7. HANDLING AND STORAGE

Handling: Use only in area provided with appropriate exhaust ventilation, To avoid ignition of vapors by static electricity discharge, all metal parts of the equipments must be grounded. Do not smoke

Product name: **ZIP PATCH ADHESIVE.**

PRINT DATE: 06/11/2003

REF: X0056

Storage: Keep containers tightly closed in a cool, well-ventilated place**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Chemical Name:** **National occupational exposure limits:**

METHYL METHACRYLATE 208mg/m-3

METHACRYLIC ACID 72mg/m-3

Engineering measures to reduce exposure In case of insufficient ventilation wear suitable respiratory equipment,- **Respiratory protection:** In case of insufficient ventilation wear suitable respiratory equipment, Breathing apparatus with filter A- **Hand protection:** solvent-resistant gloves- **Eye protection:** safety glasses, goggles- **Skin and body protection:** Wear as appropriate**Hygiene measures:** Keep away from food, drink and animal feeding stuffs, Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing.**9. PHYSICAL AND CHEMICAL PROPERTIES**

| | | | | | |
|-----------------------------|----------------------------|----------------|------------|---------------|--------------------|
| Form: | paste. | Colour: | off-white. | Odour: | pungent. |
| pH: | (50 g/l H ₂ O) | 3 | (20 °C) | | |
| Boiling point/range: | | 101 | °C | | |
| Flash point: | | 10.6 | °C | | |
| Explosion limits: | | - lower | 1.8 | vol. % | - upper 8.5 vol. % |
| Vapour pressure: | | 36.4 (MMA) | mm Hg | (20 °C) | |
| Relative density: | | - lower | 0.93 | (20 °C) | |
| | | - upper | | 1.05 | |

10. STABILITY AND REACTIVITY**Stability:** Stable, Polymerization can occur.**Conditions to avoid:** Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation.**Materials to avoid:** reducing agents, oxidizing agents, acids and bases.**Hazardous decomposition products:** carbon oxides, smoke.**11. TOXICOLOGICAL INFORMATION****Acute toxicity:** Effects of breathing high concentrations of vapour may include, bloody urine, damages Central nervous system, Lungs, methacrylic acid; LD₅₀/oral/rat = 1060mg/kg LC₅₀/inhalation/ 0 h/rat = >1300ppm.
Methyl methacrylate monomer; LD₅₀/oral/rat = 7872mg/kg LC₅₀/inhalation/ 0 h/rat = 7093ppm.**Local effects:** dermatitis**Sensitization:** Repeated or prolonged skin contact may cause allergic reactions with susceptible persons**Long term toxicity:** Prolonged or repeated exposure may cause injuries to liver, kidneys, lungs, nerves and hereditary factors**12. ECOLOGICAL INFORMATION****Mobility:** Bioaccumulation, Do not contaminate water,**Persistence / degradability:** Methyl methacrylate monomer : Biochemical oxygen demand within 5 days (BOD₅) = .14 g/g - 0.9 g/g.**Bioaccumulation:** Methyl methacrylate monomer: LC₅₀/96h/Fathead minnows = 150 ppm, LC₅₀/96h/bluegill sunfish = 232ppm**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products:** In accordance with local and national regulations.

Contaminated packaging: In accordance with local and national regulations.
European Waste Catalogue No. 08 04 09

14. TRANSPORT INFORMATION

Proper shipping name: Adhesives
UN-No: 1133
ADR/RID Class: 3
IMO Class: 3
Proper shipping name: Adhesives
ICAO Class: 3
Proper shipping name: Adhesives

HI/UN No: 1133
Packing group : II
UN/ID No: 1133

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC

- **Contains:** METHYL METHACRYLATE

water contaminating - 1
WGH Nr. 154

- **Symbol(s):**



Highly
flammable



Xi

R -phrase(s): R43 - May cause sensitization by skin contact. R37/38 - Irritating to respiratory system and skin.

S -phrase(s): S 9 - Keep container in a well-ventilated place. S16 - Keep away from sources of ignition - No smoking. S29 - Do not empty into drains. S33 - Take precautionary measures against static discharges.

Code no: 4-5 (1993)
VBF: AI

This product is not considered Corrosive to the skin in vivo according to EU Directive 67/548.EEC as amended.

16. OTHER INFORMATION

Recommended use: Adhesives

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components. All metal parts of the mixing and processing equipment must be earthed.

Revision Date: 08/07/2002.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication

SAFETY DATA SHEET**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

Product name: **ZIP PATCH ACTIVATOR**

Supplier: ITW Devcon
Shannon Industrial Estate
Co. Clare, Ireland.

Brunel Close, Park Farm Ind. Est.,
Wellingborough, Northants NN8
6QX

Emergency telephone number: 353(61)471299 Business Hours: 01933 675299
8:00am - 5:00pm

Fax No: 353(61)471285 01933 670800

2. COMPOSITION/INFORMATION ON INGREDIENTS**Identification of the preparation**

| Chemical Name | CAS-No | EEC-No | Class | Weight % |
|---------------------|---------|--------------|-------------------|----------|
| ETHYL METHYL KETONE | 78-93-3 | 606-002-00-3 | F; R11 Xi; R36/37 | 50-80 |

3. HAZARDS IDENTIFICATION

Most important hazards: Highly flammable.

Specific hazards Irritating to eyes and skin.
Code no: 5-1 (1993)

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: Move to fresh air. Consult a physician after significant exposure.

Skin contact: Wash off immediately with soap and plenty of water. Consult a physician after significant exposure.

Eye contact: Rinse immediately with plenty of water and seek medical advice.

Ingestion: Do not induce vomiting. Call a physician immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: water, Carbon Dioxide (CO₂), dry chemical.

Extinguishing media which must not be used for safety reasons:
High volume water jet.

Specific hazards: Standard procedure for chemical fires

Special protective equipment for firefighters: In case of fire, wear a self contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breath vapours or spray mist. Ensure adequate ventilation.

Environmental precautions: Do not let product enter drains. Avoid subsoil penetration.

Methods for cleaning up: Dam up, Scrape up, Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling: Use only in area provided with appropriate exhaust ventilation.

Storage: Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: **National occupational exposure limits:**

ETHYL METHYL KETONE 200ppm

Engineering measures to reduce exposure Ensure adequate ventilation, especially in confined areas..

- Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment Breathing apparatus with filter A

Product name: **ZIP PATCH ACTIVATOR**

PRINT DATE: 06/11/2003

REF: X0057

- **Hand protection:** solvent-resistant gloves.
- **Eye protection:** goggles, safety glasses with side-shields.
- **Skin and body protection:** protective suit.
- Hygiene measures:** Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | | | |
|-----------------------------------|----------------------------|----------------|----------|----------------|-------------|
| Form: | liquid. | Colour: | amber. | Odour: | solvent. |
| pH: | (50 g/l H ₂ O) | 7.5 | (20 °C) | | |
| Boiling point/range: | | 80 | °C | | |
| Flash point: | | -4.4 | °C | | |
| Flammability (solid, gas): | | liquid | | | |
| Explosion limits: | | - lower | 1.4 | vol. % - upper | 11.4 vol. % |
| Relative density: | | - lower | 0.85 | (20 °C) | |

10. STABILITY AND REACTIVITY

- Stability:** Stable.
- Conditions to avoid:** Keep away from heat and sources of ignition.

11. TOXICOLOGICAL INFORMATION

- Acute toxicity:** Methylethylketone= LD50/oral/rat = 2737 mg/kg
LD50/dermal/rabbit = 6480 mg/kg
LC50/inhalation/4h/rat = 33234 mg/m³
- Local effects:** Irritating to eyes, respiratory system and skin.

12. ECOLOGICAL INFORMATION

- Mobility:** Do not let product enter drains.

13. DISPOSAL CONSIDERATIONS

- Waste from residues / unused products:** In accordance with local and national regulations
- Contaminated packaging:** In accordance with local and national regulations.
- European Waste Catalogue No.** 08 04 99

14. TRANSPORT INFORMATION

| | | | |
|------------------------------|---------------------|------------------------|------|
| Proper shipping name: | METHYL ETHYL KETONE | | |
| UN-No: | 1193 | | |
| ADR/RID Class: | 3 | HI/UN No: | 1193 |
| IMO Class: | 3 | Packing group : | II |
| Proper shipping name: | METHYL ETHYL KETONE | | |
| ICAO Class: | 3 | UN/ID No: | 1193 |
| Proper shipping name | METHYL ETHYL KETONE | | |

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC

- **Contains:** Methyl Ethyl Ketone.
- **Symbol(s):**



F - Highly flammable



Xi - Irritant

R -phrase(s): R36/37 - Irritating to eyes and respiratory system..

S -phrase(s): S 9 - Keep container in a well-ventilated place. S16 - Keep away from sources of ignition - No smoking. S25 - Avoid contact with eyes. S33 - Take precautionary measures against static discharges.

VBF: B
Code no: 5-1(1993)

16. OTHER INFORMATION

Recommended use: Adhesives.

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components. All metal parts of the mixing and processing equipment must be earthed.

Revision Date: 08/07/2002.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication