

Safety Data Sheet

1. Identification

Name of Substance or Preparation: **022 Foam Part B**

Unique Reference Number: MASTER-CAST EF022 B

2. Composition and Ingredients

| | | | |
|-------------|-----|------------------|-----|
| Substance? | No | Substance Name: | N/A |
| CAS Number: | N/A | EC Index Number: | N/A |
| EEC Number: | N/A | | |

| Components Contributing to Hazard Classification | % by Wt. | CAS No. | Hazard | Risk phrases |
|--|----------|-------------|---------|--|
| Diphenylmethane 4,4-diisocyanate (MDI), isomers and homologues | >60% | 009016-87-9 | Harmful | R20 - Harmful by inhalation R36/37/38 - Irritating to eyes, respiratory system, and skin. R42 - May cause sensitisation by inhalation. |

3. Hazards Identification

CHIP Classification: HARMFUL

Risk Phrases: R20 Harmful by inhalation
R36/37/38 Irritating to eyes, respiratory system, and skin.
R42 May cause sensitisation by inhalation.

Other Information: Vapour hazard is low at room temperature. If heated or sprayed high concentrations can be attained that could be hazardous on single exposure and may cause irritation of upper respiratory tract and lungs. Exposure to vapour may cause sensitisation in susceptible individuals. Contact with eyes may cause irritation with corneal injury. Prolonged or repeated skin contact may cause irritation. Oral LD₅₀ is low however ingestion may cause severe burns of mouth and throat.

4. First Aid Measures

Immediate medical attention required? Yes

Professional assistance from physician required? Yes

Inhalation: Remove to fresh air and allow to rest. If not breathing give artificial respiration. Obtain medical attention and keep under observation for up to 48 hours as effects can be delayed.

Skin Contact: Wash contaminated area with soap and water. Use skin cream to prevent dryness. Launder contaminated clothing.

Eye Contact: Flush immediately with water for 10-15 minutes prising eyelids open with fingers. Seek medical attention immediately.

Ingestion: Do not induce vomiting and give nothing by mouth. Seek medical attention.

5. Fire Fighting Measures

Extinguishing Media

Suitable: Foam, dry chemical, CO₂, water mist. in large quantities

Not to be used: Small quantities of water.

Other Comments: Where large quantities are involved breathing apparatus should be used.

Special Exposure Hazards: May produce toxic vapours during combustion.

Special Fire Fighting Procedures: Evacuate downwind personnel.

Protective Equipment Required: Positive pressure self-contained breathing apparatus should be used.

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6. Accidental Release Measures

| | |
|----------------------------------|--|
| Personal Precautions | Evacuate unnecessary personnel. Wear suitable protective clothing including positive pressure self-contained breathing apparatus |
| Environmental Precautions | Do not allow to enter drains or watercourses |
| Clean-Up Procedures | Supplies of suitable decontaminant should be readily available. Contact Atlas Polymers Limited for details if required. Cover spillage with solid decontaminant, sawdust, sand or earth and allow to react for 30 minutes minimum. Sweep into open drums and remove for further decontamination and disposal. Wash spillage area with water and test for isocyanate vapours before allowing personnel into the area. |

7. Handling and Storage

| | |
|-----------------|--|
| Handling | Do not allow to come into contact with water. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Use only in a well ventilated place with local exhaust ventilation where necessary to ensure that the OEL for MDI is not exceeded. |
| Storage | Contact with moisture liberates carbon dioxide gas, which can cause dangerous pressure build-up in closed containers. Store in a dry place at 15-25°C in tightly sealed original containers. |

8. Exposure Controls

Take Measures to Prevent:

Build up of vapours. Contact with water or atmospheric moisture. Inhalation of vapour. Contact with skin and eyes.

Exposure Control Limits:

Isocyanates (all) - MEL: Long Term (8 hour) 0.02 mg/m³
Short Term (15 min.) 0.07 mg/m³

Respiratory Protection:

Vapour levels should be maintained below the control limits. Where necessary use suitable breathing equipment.

Hand Protection:

Wear suitable gloves.

Skin Protection:

Wear suitable protective clothing.

Eye Protection:

Wear goggles or safety glasses. Locate eyewash bottle in immediate area of work.

9. Physical and Chemical Properties

| | | | |
|------------------------|-----------------------|------------------------------|---|
| Appearance: | Liquid | Explosive Properties: | N/A |
| Colour: | Light Brown | Oxidising Properties: | N/A |
| pH: | N/A | Vapour Pressure: | Very low |
| Boiling Point: | >200°C (decomposes) | Relative Density: | 1.13 |
| Freezing Point: | <5°C | Solubility in Water: | Insoluble, reacts with evolution of CO ₂ |
| Flashpoint: | >200°C | Other: | - |
| Flammability: | Not flammable | | |
| Key: | N/A - Not Applicable, | N/M - Not Measured | |

10. Stability and Reactivity

Conditions to Avoid:

Excessive heat.

Materials to Avoid:

Acids, alcohols, amines, bases, water, galvanised metals, copper and its alloys.

Hazardous Decomposition Products:

Oxides of nitrogen and carbon, hydrogen cyanide, other hazardous gaseous products.

11. Toxicological Information

MDI

LD₅₀ oral, rat > 2000 mg/kg.

Single dose oral toxicity is considered to be low.

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12. Ecological Information

Reaction with water produces insoluble polyurea, which is estimated from static laboratory conditions to have a low level of biodegradation. This material is estimated to be practically non-toxic to fish, Daphnia and bacteria on a static acute basis.

13. Disposal Considerations

Likely residues and waste products:

Small quantities of waste should be reacted with polyol to neutralise prior to disposal. Empty drums should be decontaminated and scrapped.

Safe handling of residues and waste product:

Dispose of neutralised residues by controlled incineration or approved landfill in accordance with local authority regulations.

14. Transport Information

| | |
|------------------------------|----------------------------------|
| Proper Shipping Name: | DIPHENYLMETHANE-4,4-DIISOCYANATE |
| UN No.: | - |
| ADR/VLG: | - |
| ADNR/VBG: | - |
| RID/VSG: | - |
| IMO/IMDG: | - |
| ICAO/IATA: | - |

This product is not classified as hazardous for transport.

15. Regulatory Information

Supply Label Information:

HARMFUL

| | | |
|------------------------|--|--|
| Risk Phrases: | R20 | Harmful by inhalation |
| | R36/37/38 | Irritating to eyes, respiratory system and skin |
| | R42 | May cause sensitisation by inhalation |
| Safety Phrases: | S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice |
| | S28 | After contact with skin, wash immediately with plenty of water and soap |
| | S38 | In case of insufficient ventilation, wear suitable respiratory equipment |
| | S45 | In case of accident or if you feel unwell, seek medical advice immediately (show this label where possible). |
| Other: | Contains isocyanates - See information supplied by manufacturer. | |

16. Other Information

Training advice:

Please read all datasheets carefully. If any point remains unclear or if further training is required please contact Atlas Polymers Limited.

Recommended uses and restrictions:

Isocyanate component for two-part polyurethane in conjunction with a polyol. No other use recommended.

Further information sources:

Please refer to the Safety Data Sheet for accompanying polyol for further information.

Sources of key data used to compile this SDS:

Raw material data. Occupational Exposure Limits 1997. Guidance Note EH40/98. Approved Supply List (CHIP Regulations 1996).

This Safety Data Sheet has been prepared and supplied in accordance with the **Chemicals (Hazard Identification and Packaging) Regulations 1994** as amended for use by persons capable of understanding the information contained herein for the protection of the health and safety of users.

It is therefore important that this data sheet is passed to the appropriate person so that the information may be acted upon if necessary.

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