

J-FOAM 162 Part B

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name: J-Foam 162 Part B
Chemical Name: 4,4-Diisocyanodiphenyl Methane, Diphenyl Methane Diisocyanate, MDI
Supplier: Jacobson Chemicals Ltd
 Unit 4
 Newman Lane Industrial Estate
 Alton
 Hants
 GU34 2QR
Telephone: 01420 86934
Fax: 01420 549574
E-mail: sales@jacobsonchemicals.co.uk

2. COMPOSITION

Substance: N/a
Substance Name: N/a
EC Index No: N/a
CAS Number: 9016-87-9
EEC Number: N/a

<u>Constituents</u>	<u>EINECS No.</u>	<u>Contents</u>	<u>Symbol</u>	<u>Risk</u>
Polymeric Diphenylmethane Diisocyanate		60-100%	Xn	R20, 36/37/38, 42/43

3. HAZARD IDENTIFICATION

The most important hazards are: Harmful if inhaled, irritant to skin, eyes and respiratory system.
Inhalation: Harmful, may cause sensitization.
Skin Contact: Irritating to skin, may cause sensitization.
Eye Contact: Irritating to eyes.
Ingestion: N/a

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4. FIRST AID MEASURES

Immediate medical attention:	Yes
Professional assistance from physician required?	Yes
Inhalation:	Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.
Skin Contact:	Remove affected person from source of contamination. Note: Effects may be delayed. Keep affected person under observation. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.
Eye Contact:	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.
Ingestion:	Rinse mouth thoroughly. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if any discomfort continues.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	Powder, foam or CO ₂ . Larger fires: Water spray, fog or mist.
Special fire fighting procedures:	Keep run-off water out of sewers and water sources. Dike for water control. Note: Use air-supplied respirators to protect against gases/fumes. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities. Keep up-wind to avoid fumes.
Unusual fire and explosion hazards:	Prolonged exposure to heat may lead to formation of toxic gases.
Hazardous decomposition products:	Fire or high temperatures create toxic gases/vapour/fumes of carbon monoxide (CO), carbon dioxide (CO ₂), hydrogen cyanide (HCN)

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with skin or inhalation of spillage, dust or vapour.
Methods of Cleaning:	Do not touch spilled material. Cleanup personnel should use respiratory and/or liquid contact protection. Collect with absorbent, non-combustible material into suitable containers. Shovel into dry containers. Cover and move the containers. Flush the area with water. Provide ventilation and confine spill; do not allow runoff to sewer. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Recommended detailed decontamination procedures are given in Baxenden Brochure Isocyanates & Polyurethanes - Safety Advice.

7. HANDLING & STORAGE

Usage precautions:	Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Wear full protective clothing for prolonged exposure and/or high concentrations. Do not use contact lenses. Avoid contact with water, alcohols, amines and other materials that may react with isocyanates.
Storage:	Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Isocyanates react with water to liberate carbon dioxide. Any ingress of moisture into an isocyanate container, whether full or empty, can lead to a pressure build up and subsequent explosion.
Storage criteria:	Chemical storage.

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8. EXPOSURE CONTROLS

Ingredient Name	Cas No	STD	LT EXP (8hrs)	ST EXP (15 min)
Polymeric Diphenylmethane Diisocyanate	9016-87-9	MEL	0.02 mg/m ³ (Sen)	0.07 mg/m ³ (Sen)

Exposure limits for isocyanates are quoted as NCO.

OES: Occupational Exposure Standard.

MEL: Maximum Exposure Limit

Take measures to prevent:

N/a

Exposure to control limits:

N/a

Respiratory protection:

Provide adequate general and local exhaust ventilation. General Respiratory Protection: No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL). Use chemical cartridge protection with appropriate cartridge. Filter: Gas cartridge (organic substances).

Hand Protection:

General guidance on hand protection: Chemical resistance gloves required for prolonged or repeated contact. Protective gloves must be used if there is a risk of direct contact or splash. Specific Recommendations: Use gloves made of Nitrile rubber (natural, latex), Polyvinyl chloride (PVC).

Eye Protection:

Wear splash proof eye goggles to prevent any possibility of eye contact. Contact lenses should not be worn when working with this chemical.

Skin Protection:

Wear appropriate clothing to prevent any possibility of skin contact.

Other Protection:

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower.

Hygiene Work Routines:

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Change work clothing daily if contamination is reasonably probable. Promptly remove any clothing that becomes contaminated. Contaminated clothing to be placed in container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties.

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9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Liquid
Odour:	Characteristic. Musty (mouldy).
Colour:	Amber
Viscosity:	~220 mPas @ 20°C
Boiling Point (°C)	>250 @ 760 mm/Hg
Specific Gravity (Water=1):	1.20 @ 20°C
Flash Point (°C):	200 - 250
Flash Point Method:	OC (Open cup)
Vapour Pressure:	<0.0001 @ 20°C
Solubility:	Slightly soluble in organic solvents (most)
Melting Point (°C):	<10
Vapour Density (air=2):	8.5
Decomposition Temp:	>200
Auto Ignition Temperature (°C):	>560

10. STABILITY & REACTIVITY

Stability:	Normally stable. Avoid moisture.
Conditions to avoid:	Avoid contact with water.
Materials to avoid:	Acids, oxidizing. Amines. Acids, non oxidizing. Acids - organic. Bases, alkalies (inorganic). Alcohols, glycols.
Hazardous decomposition products:	Toxic gases/vapours/fumes of: Carbon monoxide (CO) Carbon Dioxide (CO ₂). Oxides of: Nitrogen. Hydrogen cyanide (HCN). Nitrous gases (NO _x).

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11. TOXICOLOGICAL INFORMATION

Toxic Dose¹-LD50:	2200mg/kg (oral-mus)
Health Hazards, General:	Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.
Inhalation:	Harmful by irritation. Irritating to respiratory system. May cause sensitization by inhalation.
Ingestion:	May cause discomfort in swallowed.
Skin:	Irritating to skin. May cause sensitization by skin contact.
Eyes:	Irritating to eyes.
Health Warnings:	This chemical can be hazardous when inhaled and/or touched. INHALATION. Prolonged inhalation of high concentrations may damage respiratory system. Pulmonary sensitizer. Severe pulmonary irritant. Recognised allergen. SKIN CONTACT. Irritating to skin. EYE CONTACT. May cause severe irritation to eyes. EYES, NOSE AND MOUTH. May cause temporary blindness and severe eye damage. RESPIRATORY SYSTEM. Repeated exposure may cause chronic upper respiratory irritation. Asthma, pulmonary sensitization. DIGESTIVE AND INTERNAL SYSTEM. Swallowing concentrated chemical may cause severe internal injury.
Route of Entry:	Inhalation. Ingestion. Skin and/or eye contact.
Target Organs:	Respiratory systems, lungs.
Medical Symptoms:	EYES AND MUCOUS MEMBRANES: Irritation, burning, lacrimation, blurred vision after liquid splash. RESPIRATORY SYSTEM: Severe pulmonary irritation. General respiratory distress, unproductive cough. SKIN: Severe skin irritation. DIGESTIVE SYSTEM: Nausea, vomiting, severe abdominal pain.
Medical Considerations:	Chronic respiratory and obstructive airway distress. Skin disorders and allergies. Employees ought to be examined by physician prior to work with diisocyanates. Allergic reactions may develop after inhalation of low concentrations, also several hours after exposure. Regular medical checks, including lung function, are recommended for long term and repeated use of isocyanates.

12. ECOLOGICAL INFORMATION

LC50 96 hrs Fish (mg/kg):	>1000mg / l. Practically non toxic.
EC50 48 hrs Daphnia (mg/l):	>1000mg/ l. Practically non toxic.
Environmental Hazards:	Not regarded as dangerous for the environment. Isocyanate reacts with water to form an insoluble polyurea, which is chemically and biologically inert.

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13. DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

14. TRANSPORT INFORMATION

Special carriage precautions in carriage: No
Classification data: No

UN Number: N/a
Proper Shipping Name: N/a
Additional Data: Not classified as hazardous for transport. No warning label required.

IMO - Sea: N/a
ICAO - Air: N/a
ADR - Road: N/a
EmS No: N/a

15. REGULATORY INFORMATION

Supply label information: Harmful.
Hazard Symbol: ☒
Risk Phrases: R20 - Harmful by inhalation.
R36/37/38 - Irritating to eyes, respiratory system and skin.
R42/43 - May cause sensitization by inhalation and skin contact.

Safety Phrases: P4 - Contains isocyanates. See information supplied by the manufacturer.
S1/2 - Keep locked up and out of the reach of children.
S23 - Do not breathe gas/fumes/vapour/spray.
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
U5 - Do not allow ingress of moisture - Risk of pressure build up.

UK Regulatory References: Health and Safety at Work Act 1974
EC Directives: Dangerous Preparations Directive 88/379
Statutory Instruments: Chemicals (Hazard Information and Packaging) Regulations.
Control of Substances Hazardous to Health.
Occupational Exposure Limits EH40.
Isocyanates toxic hazards and precautions EH16.
CHIP for everyone HSG (108)
Baxenden Brochure Isocyanates & Polyurethanes - Safety advice.

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16. OTHER INFORMATION

- a) **Training needs:** For further information contact our office.
- b) **Recommended uses and restrictions:**
- c) **Further references:**
- d) **Key data sources:** Manufacturer's data.

The data contained in this Safety Data Sheet has been supplied as required, by the Chemicals (Hazard Identification and Packaging) Regulations 1994, as amended, for the purposes of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided.

Please ensure that it is passed to the appropriate person in your company, who is capable of acting on the information.

NOTE:

This data sheet does not constitute a user's assessment of workplace risk as required by HSW Act, COSHH, Management of Health and Safety at Work regulations, or other Health & Safety at Work regulations.