

J-Cast 70D Part B

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name: J-Cast 70D Part B
Chemical Name: Diphenylmethane diisocyanate
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: No
Substance Name: Mixture
EC Index No: N/a
CAS Number: 3907-2029
EEC Number: N/a

<u>Constituents</u>	<u>Range</u>	<u>Haz Synt</u>	<u>Risk</u>
Diphenylmethane diisocyanate isomer, homologues	<80%	Xn Harmful	R20 Harmful by inhalation. R36/37 Irritating to eyes, respiratory system & skin. R42 May cause sensitization by skin contact

3. HAZARD IDENTIFICATION

The most important hazards are: Harmful by inhalation.
 J-Cast 70D Part B can react violently if brought into contact with water. J-Cast 70D part B is harmful following acute exposure to it and poses a serious health threat if inhaled.

Inhalation: If inhaled it causes irritation to the airways and may cause sensitization. In hypersensitive people, low concentrations may lead to asthmatic symptoms.

Skin Contact: Skin contact causes significant inflammation with erythema, scabs and oedema.

Eye Contact: If brought into contact with the eyes, the product causes irritation that may last over 24 hours.

Ingestion: N/a

J-Cast 70D Part B

4. FIRST AID MEASURES

Immediate medical attention:	No
Professional assistance from physician required?	Yes
Inhalation:	Ventilate premises. Remove patient to ventilated area. Should the patient feel unwell, consult a doctor.
Skin Contact:	Remove soiled clothing. Remove product with dry paper towel. Do not use solvents. Wash affected area with soap and water.
Eye Contact:	In case of contact, immediately flush with plenty of water for at least 15 minutes. Seek medical attention.
Ingestion:	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Carbon dioxide, foam dry powder or water spray.
Special protective equipment:	Suitable respiratory equipment.
Exposure hazards:	Avoid inhaling fumes. Incomplete combustion releases toxic gases.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear mask, gloves and goggles. Wash walking surfaces to avoid slipping hazard.
Methods of Cleaning:	Wipe, scrape or soak up in an inert material and dispose of according to local authority regulations.
Environmental Precautions:	Limit spillage spread with earth or sand. Notify the authorities if product escapes into watercourse. In closed areas, provide adequate ventilation. Do not allow to enter the water course.

7. HANDLING & STORAGE

Handling:	Avoid contact and inhalation of vapours and dusts. Do not eat, drink or smoke while working. Wash hands after use.
Incompatible materials:	The product reacts exothermically with materials such as alcohols, amines etc. It reacts with water to form carbon dioxide gas.
Storage:	The product is moisture sensitive. Keep in a dry place in the original containers and tightly closed. Avoid exposing to temperatures below 15°C.

J-Cast 70D Part B

8. EXPOSURE CONTROLS

Take measures to prevent:	Use adequate ventilation for the work area and storage area. Do not allow the build up of vapours/aerosols - use mechanical ventilation.
Exposure to control limits:	TLV-TWA: 0.005 ppm, 0.051 mg/m ³ .
Respiratory protection:	Required where ventilation is insufficient or exposure is prolonged or applications where heating or spraying are needed.
Hand Protection:	Use protective gloves
Eye Protection:	Safety goggles
Skin Protection:	N/a

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Liquid
NCO Content:	21
Odour:	Earthy
Colour:	Brown
Flash Point:	>200°C
Specific Gravity:	1.1 gcm ⁻³ @ 25°C
Viscosity:	20-40 mPas @ 25°C
Solubility in water:	Insoluble in water

10. STABILITY & REACTIVITY

Conditions to avoid:	Temperatures below 15°C
Materials to avoid:	Avoid contact with water, alcohols or amines, mineral acids and oxidizing agents.
Hazardous decomposition products:	It may generate toxic gases on contact with oxidizing agents & mineral acids. During combustion, CO, CO ₂ , NO _x , MDI and HCN are formed.

11. TOXICOLOGICAL INFORMATION

Diphenylmethane diisocyanate isomer & homologues

LD50 (oral): >5.000 mg/kg (rat)

LC50 (inhalation): >370 mg/m³ (4 Hr aerosol - rat)

"No effect level": 0.2 mg/m³

Inhalation of vapours at high levels may cause irritation with headache, eye irritation and respiratory difficulties. It is possible that the symptoms may appear some time after exposure. Repeated inhalation at concentration higher than TLV may cause sensitization. In hypersensitive people, low concentrations may lead to asthmatic symptoms. Do not trust sense of "smell" to detect MDI presence.

J-Cast 70D Part B

12. ECOLOGICAL INFORMATION

Adopt sound working practices, so that the product is not released into the environment. Sinks in water. Reacts slowly with water to form CO₂ gas and polyurea (yellow solid). Polyurea is not biodegradable and does not bio-accumulate. Acute toxicity LC/EC/IC₅₀>100mg/l.

13. DISPOSAL CONSIDERATIONS

Likely residues / waste products:	N/a
Safe handling of and residues/waste products:	Disposal is normally achieved by burial or combustion on an approved site and according to local authority regulations.

14. TRANSPORT INFORMATION

Special carriage precautions in carriage:	None
Classification data:	None
UN Number:	3082 Class 9
Proper Shipping Name:	Environmentally hazardous substance, Liquid NOS (contains Diphenylmethane diisocyanate).
IMO - Sea:	Class 9
ICAO - Air:	UN 3082 Class 9
ADR - Road:	None
Transport Category:	None
Limited Quantity Size:	None
Additional Data:	None

15. REGULATORY INFORMATION

Supply label information:	Harmful
Hazard Symbol:	Xn
Risk Phrases:	R20: Harmful by inhalation. R36/38: Irritating to eyes, skin and respiratory system. R42: May cause sensitization by inhalation.
Safety Phrases:	S26: In case of contact with eyes. S28: After contact with skin, wash immediately with plenty of soap and water. 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 label where possible).

J-Cast 70D Part B

16. OTHER INFORMATION

- | | |
|--|---|
| a) Training needs: | For further information contact our office. |
| b) Recommended uses and restrictions: | For use as a prototyping casting material for industrial applications only. Not for direct contact onto skin on any account. |
| c) Further references: | |
| d) Key data sources: | Manufacturer's data. <ul style="list-style-type: none">i) HSE - EH40/98: Occupational exposure limits 1998.ii) Suppliers Health & Safety data sheet.iii) Croner's Hazard information & packaging. |

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.