

# MATERIAL SAFETY DATA SHEET

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## I. PRODUCT IDENTIFICATION

PRODUCT NAME: **FLEXILON 1102 (also referred to as RHP-03)**

PRODUCT CODE: **FX1102**

CHEMICAL FAMILY: **POLYURETHANE CEMENT**

OSHA HAZARD

COMMUNICATION STATUS: THIS PRODUCT IS NOT HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

FIRE: THIS PRODUCT IS CLASSIFIED AS NON FLAMMABLE

## II. HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS NO.	CONTENTS	HEALTH CLASS	RISK
DIPHENYL METHANE-4,4'-DI-ISOCYANATE WITH CATALYST (LESS THAN 0.1%)	101-68-8	10-30%	Xn	20, 26/37/38, 42/43

## II. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Liquid

CHANGE IN PHYSICAL STATE:

Setting Point: -18°C

Initial boiling point: 260°C

DENSITY: approx. 1.1 g/cm<sup>3</sup> at 20°C

VAPOR PRESSURE: <0.0003mmHg @ 25C

VISCOSITY: approx. 1800-2600 mPas at 25°C

SOLUBILITY IN WATER: insoluble, reacts

pH VALUE: not applicable

FLASH POINT: >200°C

FREE NCO CONTENT: approx. 10%

EXPLOSIVE LIMITS: N/A

THERMAL DECOMPOSITION: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: No hazardous decomposition products if stored and handled correctly.

HAZARDOUS REACTIONS: Exothermic reaction with amines and alcohols; reacts with water forming CO<sub>2</sub>.

FIRE & EXPLOSION HAZARDS: Not classed as flammable. If involved in a fire, it may emit noxious and toxic fumes. Due to reaction with water producing CO<sub>2</sub> gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.

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#### IV. LABELLING FOR USER PURPOSES AND TRANSPORT

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EEC Classification:	Harmful
Hazard Symbol:	X <sub>n</sub>
Risk Phrases:	R20 Harmful by inhalation
	R42 May cause sensitization by inhalation
Safety Phrases:	S23 Do not breathe gas / fumes / vapor / spray
	S24/25 Avoid contact with skin and eyes
	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
	S37 Wear suitable gloves
	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 the label where possible).
	P4 Contains isocyanates

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#### V. STORAGE AND HANDLING

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**USAGE PRECAUTIONS:** Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level.

**STORAGE PRECAUTIONS:** Keep in cool, dry ventilated storage and closed containers. Keep in original container. Store below 25C.

**HAZARDOUS REACTIONS:** Reaction with water (moisture) produces CO<sub>2</sub> gas. Exothermic reaction with materials containing active hydrogen groups.

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#### VI. EXPOSURE AND PERSONAL PROTECTION

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INGREDIENT NAME:	CAS No.	STD	LT EXP	ST EXP
Diphenyl Methane-4,4'-Di-isocyanate	101-68-8	MEL	(8 hrs) 0.02MG/M3(Sen)	(15 min) 0.07mg/m3(Sen)

##### PERSONAL PROTECTION

Gloves: At all times.  
 Eye Protection: At all times.  
 Respirators: Suitable respiratory equipment with positive air supply should be used in cases of insufficient ventilation or where operational procedures demand it.  
 Hygienic Routine: DO NOT SMOKE IN WORK AREA. No eating or drinking while working with this material.

##### FIRE AND EXPLOSION HAZARDS:

Not classed as flammable. If involved in a fire, it may emit noxious and toxic fumes. Due to reaction with water producing CO<sub>2</sub> gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.

##### DISPOSAL:

Disposal should be in accordance with local, state or national legislation.

Small quantities and empty drums: pre-treat to neutralize prior to disposal.  
 Large quantities: incinerate under approved controlled conditions, using incinerators suitable for the disposal of noxious chemical waste.

## VII. EMERGENCY MEASURES

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### ACCIDENTAL RELEASE:

Wear necessary protective equipment. Ventilate well. Avoid contact with skin or inhalation of spillage, dust or vapor. Collect with absorbent, non-combustible material into suitable containers. Containers with collected spillage must be properly labeled with correct contents and hazard symbol. Avoid water on spilled material or leaking containers. Do not contaminate water sources or sewer.

### FIRE FIGHTING EQUIPMENT.

Extinguishing media: Use powder, CO2 or foam. DO NOT use water if avoidable.

Special fire fighting procedures: Do not get water inside container. NOTE: Use air supplied respirators to protect against gases / fumes. Use special clothing. PVC boots should be worn.

### FIRST AID:

<u>Skin contact:</u>	Wash immediately with water followed by soap and water. If symptoms persist, Obtain medical attention. Contaminated clothing should be laundered before Re-use.
<u>Eye contact:</u>	Irrigate immediately with plenty of clean water or an eyewash solution for at least 15 minutes. Obtain medical attention.
<u>Inhalation:</u>	The affected person should be moved to fresh air and made to rest. Obtain medical attention. Treatment is symptomatic for primary irritation or bronchospasm.
<u>Ingestion:</u>	Give water or milk to drink. Do <u>not</u> induce vomiting. Obtain medical attention as a precaution. Treat symptomatically. Get medical attention.

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## VIII. TOXICOLOGICAL INFORMATION

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<u>HEALTH WARNINGS:</u>	INHALATION. Preparation contains small amounts of isocyanate that may cause allergic reaction and irritation of respiratory system. Prolonged inhalation of high concentrations may damage respiratory system. SKIN CONTACT. Irritating to skin. May cause sensitization by skin contact. EYE CONTACT. Irritating to eyes INGESTION. May cause discomfort
<u>TARGET ORGANS.</u>	Skin. Eyes. Respiratory system, Lungs.

Summary: This product is a respiratory irritant and potential respiratory sensitizer. Repeated inhalation of the vapor at levels above the OEL could cause respiratory sensitization. It may cause mild eye irritation and slight skin irritation (P.I. Index = 1). It may cause skin sensitization. This product is of low acute toxicity by ingestion (LD50 > 5g/kg) and of no more than slight toxicity by skin absorption.

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