

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

**Product name:** **FLEXANE 80L RESIN.**

**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 01933 675299

**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 %
4,4'-METHYLENEDI(CYCLOHEXYLISOCYANATE)	5124-30-1	615-009-00-0	T; R23 Xi; R36/37/38 R42/43	<5

**3. HAZARDS IDENTIFICATION**

**Most important hazards:** May cause sensitization by inhalation and skin contact.

**Specific hazards** Harmful by inhalation. Irritating to eyes and skin.

**4. FIRST AID MEASURES**

**General advice:** Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Show this safety data sheet to the doctor in attendance.

**Inhalation:** Move to fresh air Consult a physician if necessary.

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

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes Consult a physician if necessary.

**Ingestion:** Rinse mouth. Do not induce vomiting. If a person vomits when lying on his back, turn over on his side. Call a physician immediately.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media:** foam Carbon Dioxide (CO<sub>2</sub>), dry chemical,

**Extinguishing media which must not be used for safety reasons:** water.

**Specific hazards:** Cool containers / tanks with water spray.

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

**Specific methods:** Standard procedure for chemical fires.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Ensure adequate ventilation. Wear self-contained breathing apparatus and protective suit

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

**Methods for cleaning up:** Soak up with inert absorbent material, Shovel into a dry metal container.

**7. HANDLING AND STORAGE**

**Handling:** Open drum carefully as content may be under pressure. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage:** Keep container tightly closed in a dry and well-ventilated place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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

4,4'-METHYLENEDI(CYCLOHEXYLISOCYANATE)

no data available

Product name: **FLEXANE 80L RESIN.**

PRINT DATE: 03/11/2003

REF: X0020

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<b>Engineering measures to reduce exposure</b>	Ensure adequate ventilation, especially in confined areas..
- <b>Respiratory protection:</b>	Breathing apparatus with filter A.
- <b>Hand protection:</b>	impervious butyl rubber gloves. Neoprene gloves.
- <b>Eye protection:</b>	Wear face-shield and protective suit for abnormal processing problems
- <b>Skin and body protection:</b>	boots, protective suit.
<b>Hygiene measures:</b>	Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Do not smoke.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form:</b>	liquid.	<b>Colour:</b>	clear.	<b>Odour:</b>	slight.
<b>pH:</b>	( 50 g/l H <sub>2</sub> O)	7			
<b>Boiling point/range:</b>		>149.	°C		
<b>Flash point:</b>		>234.	°C		
<b>Melting point/range</b>		n/d	°C		
<b>Flammability (solid, gas):</b>		Not applicable.			
<b>Oxidizing properties:</b>		Not applicable.			
<b>Vapour pressure:</b>		<10	mm Hg	( 25 °C)	
<b>Relative density:</b>		- lower	1.04	( 25 °C)	
			( 25 °C)		
<b>Viscosity:</b>		( 25 °C)	3500		

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**10. STABILITY AND REACTIVITY**

<b>Stability:</b>	Stable.
<b>Conditions to avoid:</b>	Keep away from heat and sources of ignition.
<b>Materials to avoid:</b>	water, alcohols, amines, strong bases.
<b>Hazardous decomposition products:</b>	carbon oxides, nitrogen oxides (NO <sub>x</sub> ).

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**11. TOXICOLOGICAL INFORMATION**

<b>Acute toxicity:</b>	Irritating to respiratory system and skin. LD50/dermal/rabbit = >7900mg/kg.
<b>Sensitization:</b>	Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.
<b>Long term toxicity:</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

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**12. ECOLOGICAL INFORMATION**

<b>Mobility:</b>	Do not contaminate water.
<b>Persistence / degradability:</b>	Assessment of biological degradability (Closed-Bottle Test): 60 %.
<b>Bioaccumulation:</b>	LC50/48h/daphnia = >500mg/l Acute fish toxicity = 1.2 mg/l

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**13. DISPOSAL CONSIDERATIONS**

<b>Waste from residues / unused products:</b>	In accordance with local and national regulations. Solidify unexposed surplus and dispose of together with processed material as cured plastic waste.
<b>Contaminated packaging:</b>	Empty containers can be landfilled after cleaning, when in compliance with local regulations.
<b>European Waste Catalogue No.</b>	08 04 99

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**14. TRANSPORT INFORMATION**

<b>Proper shipping name:</b>	Not classified as dangerous in the meaning of transport regulations: UN, ADR/RID, IMO & IATA/ICAO.
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## 15. REGULATORY INFORMATION

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

- **Contains:** 4,4'-METHYLENEDI(CYCLOHEXYLISOCYANATE)
- **Symbol(s):**

**R -phrase(s):** R20 - Also harmful by inhalation. R42/43 - May cause sensitization by inhalation and skin contact  
**S -phrase(s):** 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. 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).

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

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## 16. OTHER INFORMATION

**Recommended use:** Adhesives.

**Recommended restrictions:**

When used in a mixture, read the labels and safety data sheets of all components.

**Revision Date:** 18/07/2002

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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: **FLEXANE 80/94L HARDENER**  
 Supplier: ITW Devcon  
 Shannon Industrial Estate Brunel Close, Park Farm Ind. Est.,  
 Co. Clare, Ireland. Wellingborough, Northants NN8 6QX  
 Emergency telephone number: 353(61)471299 01933 675299  
 Fax No: 353(61)471285 01933 670800

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
DIETHYLTOLUENEDIAMINE	68479-98-1		Xn: R21/22 R48	30-40

## 3. HAZARDS IDENTIFICATION

Most important hazards: Xn - Harmful. N - Dangerous for the environment.  
 Specific hazards Harmful in contact with skin and if swallowed,

## 4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance. Avoid contact with skin and eyes.  
 Inhalation: Move to fresh air, Consult a physician if necessary.  
 Skin contact: Wash off immediately with soap and plenty of water.  
 Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  
 Ingestion: Drink plenty of water, Induce vomiting immediately and call a physician. If a person vomits when lying on his back, turn over on his side.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: foam, dry powder, Carbon Dioxide (CO<sub>2</sub>).  
 Extinguishing media which must not be used for safety reasons:  
 water  
 Specific hazards: Burning produces irritant fumes.  
 Special protective equipment for firefighters: In case of fire, wear a self contained breathing apparatus, protective suit.  
 Specific methods: Standard procedure for chemical fires.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes, Inhalation.  
 Environmental precautions: Do not let product enter drains  
 Methods for cleaning up: Soak up with inert absorbent material, Shovel into a dry metal container.

## 7. HANDLING AND STORAGE

Handling: Avoid contact with skin and eyes. Open drum carefully as content may be under pressure. Use only in well-ventilated areas.  
 Storage: Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: National occupational exposure limits:  
 DIETHYLTOLUENEDIAMINE no data available

Product name: **FLEXANE 80/94L  
HARDENER**

PRINT DATE: 19/03/2003

REF: X0023

Engineering measures to reduce exposure	Ensure adequate ventilation, especially in confined areas.
- Respiratory protection:	Not required with adequate ventilation. If the product is heated, wear approved organic vapor respirator.
- Hand protection:	nitrile rubber and Neoprene gloves.
- Eye protection:	safety glasses with side-shields.
- Skin and body protection:	protective suit , safety shoes.
Hygiene measures:	Keep away from food, drink and animal feeding stuffs. Do not smoke. General industrial hygiene practice

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid.	Colour:	black.	Odour:	slight.
pH:	( 50 g/l H <sub>2</sub> O)	8.5			
Boiling point/range:		>232	°C		
Flash point:		>177	°C		
Melting point/range:		n/d	°C		
Flammability (solid, gas):		Not applicable			
Explosive properties:		Not applicable.			
Vapour pressure:		<1			
Relative density:		- lower	1.08	( 20 °C)	
			( 25 °C)		
Viscosity:		( 25 °C)	1000		

## 10. STABILITY AND REACTIVITY

Stability:	No decomposition if stored and applied as directed.
Conditions to avoid:	Keep away from heat and sources of ignition.
Materials to avoid:	oxidizing agents, acids.
Hazardous decomposition products:	nitrogen oxides (NO <sub>x</sub> ), Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD <sub>50</sub> /oral/rat = >500 mg/kg LD <sub>50</sub> /dermal/rat = >2000 mg/kg
Local effects:	The product causes irritation of eyes, skin and mucous membranes.

## 12. ECOLOGICAL INFORMATION

Mobility:	Do not contaminate water.
Persistence / degradability:	Not readily biodegradable.

## 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:	Solidify unexposed surplus and dispose of together with processed material as cured plastic waste - 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:	Not classified as dangerous in the meaning of transport regulations: UN, ADR/RID, IMO & IATA/ICAO..
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## 15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC	
- Contains:	DIETHYLTOLUENEDIAMINE

- Symbol(s):



Xn - Harmful.



N -  
Dangerous  
for the  
environment

R -phrase(s): R21/22 - Also harmful in contact with skin and if swallowed.  
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation. R36 - Irritating to eyes. R50 - Very toxic to aquatic organisms. R53 - May cause long-term adverse effects in the aquatic environment.

S -phrase(s): 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. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

#### 16. OTHER INFORMATION

Recommended use: Adhesives.

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components.

Revision date: 12/02/2003

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