



SAFETY DATA SHEET FLEXANE GP PUTTY HARDENER

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	FLEXANE GP PUTTY HARDENER
PRODUCT NO.	X0025BB
SUPPLIER	ITW DEVCON BAY 150 SHANNON INDUSTRIAL ESTATE SHANNON CO CLARE IRELAND T: +353 (0)61471299 F: 353(0)61471285
EMERGENCY TELEPHONE	+44 (0)208 762 8322

2 HAZARDS IDENTIFICATION

Irritating to eyes. Harmful in contact with skin and if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xn;R21/22, R48/20. Xi;R36. N;R50/53.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
DIETHYLMETHYLBENZENEDIAMINE	270-877-4	68479-98-1	30-60%	Xn;R21/22,R48/22 Xi;R36 N;R50/53
PROPYLENE GLYCOL DIBENZOATE		19224-26-1	1-5%	N;R51/53.

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

INHALATION

Move the exposed person to fresh air at once. Contact physician if discomfort continues.

INGESTION

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.

SKIN CONTACT

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

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention. Contact physician if irritation persists.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

FLEXANE GP PUTTY HARDENER

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Keep up-wind to avoid fumes. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.

SPECIFIC HAZARDS

By heating and fire, irritating vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Do not breathe vapour.

ENVIRONMENTAL PRECAUTIONS

Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid contact with skin and eyes. Handle and open container with care. Use only in well-ventilated areas. Do not eat, drink or smoke when using the product. Observe good industrial hygiene practices.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Provide eyewash, quick drench.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION

Use protective gloves. Nitrile gloves are recommended. Neoprene gloves are recommended.

EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable.

HYGIENE MEASURES

Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product.

SKIN PROTECTION

Protection suit must be worn.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Liquid

FLEXANE GP PUTTY HARDENER

COLOUR	Clear		
ODOUR	Slightly pungent odour		
SOLUBILITY	Slightly soluble in water.		
BOILING POINT (°C)	308	MELTING POINT (°C)	n/d
RELATIVE DENSITY	1.08 @ 20 °C	pH-VALUE, CONC. SOLUTION	8.5 @ 20 °C
VISCOSITY	144-280 mPas @ 25	FLASH POINT (°C)	168

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Avoid contact with acids and oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Nitrous gases (NOx). Oxides of: Carbon monoxide (CO). Carbon dioxide (CO₂). Vapours/gases/fumes of: Ammonia or amines.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 >500 mg/kg (oral rat)

INHALATION

Irritating to respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

INGESTION

Harmful if swallowed.

SKIN CONTACT

Irritating to skin. Harmful in contact with skin.

EYE CONTACT

Irritating to eyes.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Avoid releasing to the environment. The product contains a substance which is very toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

DEGRADABILITY

The product is not readily biodegradable.

WATER HAZARD CLASSIFICATION

WGK 2

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS

08 04 99

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

FLEXANE GP PUTTY HARDENER

15 REGULATORY INFORMATION

LABELLING



Harmful



Dangerous for the environment

CONTAINS

DIETHYLMETHYLBENZENEDIAMINE

RISK PHRASES

R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36	Irritating to eyes.
R21/22	Harmful in contact with skin and if swallowed.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through 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.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.

16 OTHER INFORMATION

REVISION DATE 08/10/2008

REV. NO./REPL. SDS GENERATED 5

DATE 11.01.05

RISK PHRASES IN FULL

R21/22	Harmful in contact with skin and if swallowed.
R36	Irritating to eyes.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



SAFETY DATA SHEET FLEXANE GP PUTTY RESIN

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME FLEXANE GP PUTTY RESIN
 PRODUCT NO. X0025B
 SUPPLIER ITW DEVCON
 BAY 150
 SHANNON INDUSTRIAL ESTATE
 SHANNON
 CO CLARE
 IRELAND
 T: +353 (0)61471299
 F: 353(0)61471285
 EMERGENCY TELEPHONE +44 (0)208 762 8322

2 HAZARDS IDENTIFICATION

Harmful by inhalation. May cause sensitisation by inhalation and skin contact.

CLASSIFICATION Xn;R20. R42/43.

HUMAN HEALTH

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. Persons with impaired lung functions should not handle this preparation. Persons susceptible for allergic reactions should not handle this product.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)	225-863-2	5124-30-1	1-5%	T;R23 R42/43 Xi;R36/37/38
DIPHENYLMETHANEDIISOCYANATE -Isomers & homologues		9016-87-9	1-5%	Xn;R20. Xi;R36/37/38. R42.

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

INHALATION

Move the exposed person to fresh air at once. Contact physician if discomfort continues.

INGESTION

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Contact physician if irritation persists.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5 FIRE-FIGHTING MEASURES

FLEXANE GP PUTTY RESIN

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide or dry powder.

SPECIAL FIRE FIGHTING PROCEDURES

Keep up-wind to avoid fumes. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

SPECIFIC HAZARDS

Avoid breathing fire vapours.

PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet.

ENVIRONMENTAL PRECAUTIONS

Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

SPILL CLEAN UP METHODS

Absorb spillage with non-combustible, absorbent material. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Avoid contact with skin and eyes. Do not smoke, use naked flames or other sources of ignition. Observe good industrial hygiene practices.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry, cool and well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)	WEL		0.02 mg/m3(Sen)		0.07 mg/m3(Sen)	
DIPHENYLMETHANEDIISOCYANATE -Isomers & homologues	WEL		0.02 mg/m3(Sen)		0.07 mg/m3(Sen)	

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Provide eyewash, quick drench.

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

RESPIRATORY EQUIPMENT

In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter (type A2).

HAND PROTECTION

Use protective gloves made of: Rubber, neoprene or PVC.

FLEXANE GP PUTTY RESIN**EYE PROTECTION**

Use approved safety goggles or face shield.

HYGIENE MEASURES

Keep away from food, drink and animal feeding stuffs. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product.

SKIN PROTECTION

Protection suit must be worn.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Viscous liquid		
COLOUR	Clear		
ODOUR	Musty (mouldy).		
SOLUBILITY	Insoluble in water		
BOILING POINT (°C)	>204	RELATIVE DENSITY	1.1 25 °C
VAPOUR DENSITY (air=1)	8.5	VAPOUR PRESSURE	<10mmHg
pH-VALUE, CONC. SOLUTION	7-8 @ 20 °C	VISCOSITY	7,600-11,200 mPas 25
FLASH POINT (°C)	233.89		

10 STABILITY AND REACTIVITY**STABILITY**

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Avoid contact with strong oxidisers. Water, moisture.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Nitrous gases (NOx). Oxides of: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines.

11 TOXICOLOGICAL INFORMATION**INHALATION**

Harmful by inhalation. May cause sensitisation by inhalation.

SKIN CONTACT

Irritating to skin. May cause sensitisation by skin contact. Risk of sensitisation or allergic reactions among sensitive individuals. Prolonged contact may cause redness, irritation and dry skin.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

Preparation contains small volumes of isocyanate which may cause allergic reaction and irritation of respiratory system.

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

Avoid release to the environment. Do not allow ANY environmental contamination. Do not discharge into drains, water courses or onto the ground.

LC 50, 96 Hrs, FISH mg/l 1.2mg/l

EC 50, 48 Hrs, DAPHNIA, mg/l >500mg/l

DEGRADABILITY

Assessment of biological degradability (Closed-Bottle Test) 60 %.

FLEXANE GP PUTTY RESIN

WATER HAZARD CLASSIFICATION

WGK 1

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

WASTE CLASS

08 04 99

14 TRANSPORT INFORMATION

GENERAL

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15 REGULATORY INFORMATION

LABELLING



Harmful

CONTAINS

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)
DIPHENYLMETHANEDIISOCYANATE -Isomers & homologues

RISK PHRASES

R20	Harmful by inhalation.
R42/43	May cause sensitisation by inhalation and skin contact.

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.
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).
P4	Contains isocyanates. See information supplied by the manufacturer.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC.

16 OTHER INFORMATION

REVISION DATE 08/10/2008

REV. NO./REPL. SDS GENERATED 7

DATE 10.01.05

RISK PHRASES IN FULL

R20	Harmful by inhalation.
R23	Toxic by inhalation.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42	May cause sensitisation by inhalation.
R42/43	May cause sensitisation by inhalation and skin contact.

FLEXANE GP PUTTY RESIN

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