1. Identification

Product identifier

Product name  FLEXANE GP PUTTY  RESIN

Product number  X0025B

Recommended use of the chemical and restrictions on use

Application  Resin.

Details of the supplier of the safety data sheet

Supplier  ITW Performance Polymers
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
mail@itwpp.com

Emergency telephone number

Emergency telephone  +44(0)1235 239 670 (24h)

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards  Not Classified


Environmental hazards  Not Classified

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 function should not handle this product. Persons susceptible to allergic reactions should not handle this product.

Label elements

Pictogram

Signal word  Danger
FLEXANE GP PUTTY RESIN

Hazard statements
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe vapor/spray.
P261 Avoid breathing vapor/spray.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 [In case of inadequate ventilation] wear respiratory protection.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P308+P313 If exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

Contains
DIPHENYL METHANE-4,4'-DI-ISO CYANATE, 4,4'- METHYLENEDI (CYCLOHEXYL ISO CYANATE)

Other hazards
This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>DIPHENYL METHANE-4,4'-DI-ISO CYANATE</th>
<th>1-2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 101-68-8</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2A - H319
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
Carc. 2 - H351
STOT SE 3 - H335
STOT RE 2 - H373
FLEXANE GP PUTTY RESIN

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)  1-2%
CAS number: 5124-30-1

Classification
Acute Tox. 3 - H331
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
STOT SE 3 - H335

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of 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 the label where possible).

Inhalation
Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion
Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

Skin Contact
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact
Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Indication of immediate medical attention and special treatment needed

Notes for the doctor
No specific recommendations. If in doubt, get medical attention promptly.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media
Extinguish with foam, carbon dioxide or dry powder.

Special hazards arising from the substance or mixture

Specific hazards
Avoid breathing fire gases or vapors.

Advice for firefighters

Protective actions during firefighting
Keep up-wind to avoid fumes. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
FLEXANE GP PUTTY RESIN

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

Environmental precautions
Avoid or minimize the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up
Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labeled with correct contents and hazard symbol.

Reference to other sections
Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage
Precautions for safe handling
Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. Avoid contact with skin and eyes. No smoking, sparks, flames or other sources of ignition near spillage. Good personal hygiene procedures should be implemented.

Conditions for safe storage, including any incompatibilities
Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

Specific end uses(s)
The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection
Ingredient comments
WEL = Workplace Exposure Limits

Exposure controls
Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Appropriate engineering controls
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with OSHA 1910.133.

Hand protection
Wear protective gloves made of the following material: Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection
Wear chemical protective suit.
FLEXANE GP PUTTY RESIN

Hygiene measures

Provide eyewash station and safety shower. Keep away from food, drink and animal feeding stuffs. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Promptly remove any clothing that becomes wet or contaminated.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
</tr>
<tr>
<td>Color</td>
</tr>
<tr>
<td>Odor</td>
</tr>
<tr>
<td>pH</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
</tr>
<tr>
<td>Flash point</td>
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<tr>
<td>Vapor pressure</td>
</tr>
<tr>
<td>Vapor density</td>
</tr>
<tr>
<td>Relative density</td>
</tr>
<tr>
<td>Solubility(ies)</td>
</tr>
<tr>
<td>Viscosity</td>
</tr>
<tr>
<td>Other information</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

| Reactivity                                           | Oxidizing materials. Reacts strongly with water. |
| Stability                                            | Stable at normal ambient temperatures and when used as recommended. |
| Possibility of hazardous reactions                   | Not available. |
| Conditions to avoid                                  | Avoid heat, flames and other sources of ignition. |
| Materials to avoid                                   | Avoid contact with strong oxidizing agents. Water, moisture. |
| Hazardous decomposition products                     | Fire or high temperatures create: Nitrous gases (NOx). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). Vapours/gases/fumes of: Ammonia or amines. |

11. Toxicological information

<table>
<thead>
<tr>
<th>Information on toxicological effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - inhalation</td>
</tr>
</tbody>
</table>

5/8
FLEXANE GP PUTTY RESIN

ATE inhalation (gases ppm) 30,420.09
ATE inhalation (vapours mg/l) 118.32
ATE inhalation (dusts/mists mg/l) 18.82

Inhalation Harmful by inhalation. May cause sensitisation by inhalation.

Skin Contact Irritating to skin. May cause sensitisation by skin contact. May cause sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes.

Acute and chronic health hazards The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation.

4,4’-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 18,200.0
Species Rat
ATE oral (mg/kg) 18,200.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,000.0
Species Rat
ATE dermal (mg/kg) 7,000.0

Acute toxicity - inhalation

ATE inhalation (gases ppm) 700.0
ATE inhalation (vapours mg/l) 3.0
ATE inhalation (dusts/mists mg/l) 0.5

12. Ecological Information

Ecotoxicity Avoid release to the environment. Avoid or minimize the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground.

Acute toxicity - fish LC₅₀, 96 hours: 1.2mg/l mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >500mg/l mg/l, Daphnia magna

Persistence and degradability

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

Bioaccumulative potential
### 13. Disposal considerations

#### Waste treatment methods

**General information**

When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods**

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**Waste class**

08 04 99

### 14. Transport information

**General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**UN Number**

No information required.

**UN proper shipping name**

No information required.

**Transport hazard class(es)**

No information required.

**Packing group**

No information required.

**Environmental hazards**

Environmentally Hazardous Substance

No.

**Special precautions for user**

No information required.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information required.
FLEXANE GP PUTTY RESIN

Hazard statements in full

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.

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.