
SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Product Name: FLEXILON 1110
- UFI: Not available
- Product Part Number: 1110

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture: Wetpour binder

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Rosehill Polymers Ltd
- Address of Supplier: Rosehill Mills
Beech Road
Sowerby Bridge
West Yorkshire
UK
HX6 2JT
- Telephone: +44 (0)1422 839610
- Email: sds@rosehillpolymers.com

1.4 Emergency telephone number

- Emergency Telephone: Reference: ROSEHILLPOLYMERS29003-NCEC
Europe: +44 1235 239670
France: +33 1 72 11 00 03
Netherlands: +31 10 713 8195
East/South East Asia: +65 3158 1074
Singapore: +65 3165 2217
Australia: +61 2 8014 4558
New Zealand: +64 9 929 1483
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SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

- CLP: Resp. Sens. 1, Skin Sens. 1, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2

2.2 Label elements

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SECTION 2: Hazards identification (....)

- Signal Word: Danger

Hazard statements

- H335 - May cause respiratory irritation.
- H373 - May cause damage to organs through prolonged or repeated exposure by inhalation
- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317 - May cause an allergic skin reaction.
- EUH204 - Contains isocyanates. May produce an allergic reaction.

Precautionary statements

- P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P271 - Use only outdoors or in a well-ventilated area.

2.3 Other hazards

- As from 24 August 2023 adequate training is required before industrial or professional use
- Contains: Carbodiimid modified MDI: Methylenediphenyldiisocyanate, oligomers

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Carbodiimid modified MDI: Methylenediphenyldiisocyanate, oligomers

CAS Number:	25686-28-6
EC Number:	500-040-3
Concentration:	30 - 60%
Specific Concentration Limits:	Not available
M factor:	Not available
Acute toxicity estimate:	Not available
Categories:	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, Carc. 2, STOT SE 3, STOT RE 2
Symbols:	GHS07, GHS08
H Statements:	H315, H317, H319, H332, H334, H335, H351, H373

SECTION 4: First aid measures

4.1 Description of first aid measures

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- Keep warm and at rest

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SECTION 4: First aid measures (....)

- After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water
- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Seek medical attention if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing.
- May cause an allergic skin reaction.
- Capable of causing respiratory sensitization
- Causes allergic reaction in susceptible people

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
 - Following severe exposure medical follow-up should be monitored for at least 48 hours.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

- Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.
- In case of fire: use foam, carbon dioxide or dry agent to extinguish.

5.2 Special hazards arising from the substance or mixture

- Prevent run off water from entering drains if possible
- Combustion products may include: carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons and HCN. In the event of extreme heat (>500 degrees C), aniline is suspected of being formed.

5.3 Advice for firefighters

- Standard procedure for chemical fires. Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
 - Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8
- Ensure adequate ventilation

6.2 Environmental precautions

- Do not allow to enter public sewers and watercourses
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SECTION 6: Accidental release measures (....)

- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Absorb spillage in suitable inert material
- Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

- See Section 8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Provide good ventilation of working area.
- See Section 8
- Avoid contact with skin and eyes
- Do not breathe gas, fume, vapours or spray. Use approved respirator if air contamination is above an acceptable level.

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed, in a cool, well ventilated place

7.3 Specific end use(s)

- See Section 1.2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Carbodiimid modified MDI: Methylenediphenyldiisocyanate, oligomers

DNEL (Industry; inhalational, long term local effects): 0.05 mg/m³

DNEL (Industry; inhalational, short term local effects): 0.1 mg/m³

DNEL (Consumer; inhalational, long term local effects): 0.025 mg/m³

DNEL (Consumer; inhalational, short term local effects): 0.05 mg/m³

8.2 Exposure controls



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Straw to brown liquid
- Odour: Slight odour

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SECTION 9: Physical and chemical properties (....)

- Melting point/Range: Not available
- Boiling Point/Range: Not available
- Flammability: No data available
- pH: Not available
- Solubility in water: Insoluble in water. Soluble in the following materials: Aromatic solvents
- Density: ~1.1 @20°C
- Flashpoint: >93°C

9.2 Other information

- No information available
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SECTION 10: Stability and reactivity

10.1 Reactivity

- Reacts with water
- Sensitive to moist air or water

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- Reaction with water (moisture) produces CO₂-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface.

10.4 Conditions to avoid

- Keep away from heat and moisture

10.5 Incompatible materials

- Incompatible with amines
- Incompatible with alcohols
- Incompatible with acids and alkalis

10.6 Hazardous decomposition products

- Carbon oxides may be formed
 - Decomposition products may include hydrogen cyanide
 - Decomposition products may include nitrogen oxides
-

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Estimated LD₅₀ (oral) (ATE) : >2000 mg/kg
Estimated LD₅₀ (dermal) (ATE) : >4000 mg/kg

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SECTION 11: Toxicological information (....)

Estimated LD₅₀ (inhalational) (ATE) : 26.7403 mg/l/4hr (gas/vapour)

Carbodiimid modified MDI: Methylenediphenyldiisocyanate, oligomers

LD₅₀ (oral, rat): >5,000 mg/kg

LD₅₀ (dermal, rabbit): >9,400 mg/kg

LC₅₀ (inhalation, rat): 0.368 mg/l 4h dust/mist

Skin corrosion/irritation

Epidemiological studies have shown evidence of skin sensitisation. Animal studies have shown that respiratory sensitisation can be induced by skin contact with known respiratory sensitisers including diisocyanates. These results emphasize the need for protective clothing including gloves to be worn at all times when handling these chemicals or in maintenance work.

Serious eye damage/irritation

Causes irritation

Respiratory or skin sensitisation

There is evidence that the product can cause respiratory hypersensitivity. This product is a respiratory irritant and potential respiratory sensitiser: repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation. Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons.

Germ cell mutagenicity

No information available

Carcinogenicity

Rats have been exposed for two years to a respirable aerosol of polymeric MDI which resulted in chronic pulmonary irritation at high concentrations. Only at the top level (6 mg/m³), there was a significant incidence of a benign tumour of the lung (adenoma) and one malignant tumour (adenocarcinoma). There were no lung tumours at 1 mg/m³ and no effects at 0.2 mg/m³. Overall, the tumour incidence, both benign and malignant, and the number of animals with the tumours were not different from controls. The increased incidence of lung tumours is associated with prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung, which occurred throughout the study. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumour formation will occur.

Reproductive toxicity

No information available

STOT (specific target organ toxicity) - single exposure

No information available

STOT (specific target organ toxicity) - repeated exposure

No information available

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SECTION 11: Toxicological information (....)

Aspiration hazard

May cause discomfort if swallowed. Gastrointestinal symptoms, including upset stomach.

11.2 Information on other hazards

- No information available
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SECTION 12: Ecological information

12.1 Toxicity

Carbodiimid modified MDI: Methylenediphenyldiisocyanate, oligomers

LC₅₀ (fish): >1,000 mg/l (96 hr)

12.2 Persistence and degradability

- Not readily biodegradable

12.3 Bioaccumulative potential

- Bioaccumulation is unlikely.

12.4 Mobility in soil

- By considering the production and use of the substance, it is unlikely that significant environmental exposure in the air or water will arise. Immiscible with water, but will react with water to produce inert and non-biodegradable solids. Conversion to soluble products, including diamino- diphenylmethane (MDA), is very low under the optimal laboratory conditions of good dispersion and low concentration. In air, the predominant degradation process is predicted to be a relatively rapid OH radical attack, by calculation and by analogy with related diisocyanates.

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

- No information available

12.7 Other adverse effects

- No information available
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
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SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: Not classified as hazardous for transport

14.2 UN proper shipping name

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SECTION 14: Transport information (....)

- Proper Shipping Name:

14.3 Transport hazard class(es)

- Hazard Class: Not applicable

14.4 Packing group

- Packing Group: Not applicable

14.5 Environmental hazards

- Presents little or no hazard to the environment

14.6 Special precautions for user

- Not applicable

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Not applicable.

15.2 Chemical safety assessment

- A REACH chemical safety assessment has not been carried out
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SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H332: Harmful 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 version replaces all previous versions. The information contained in this Safety Data Sheet has been prepared in accordance with the best available information based on technical data believed to be reliable at the time of issue. Recipients rely on the information at their own risk. 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 themselves as to the suitability of such information for their own particular use.

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