

Safety data sheet according to Regulation EG 1907/2006

Date / revised on: 21-12-2011

Product: Polyurethane resin

1. Identification of the substance and the company

Tradename : Polyurethane resin
CAS-number description : P-MDI (9016-87-9)
Product use : Isolation of electrical connections
Manufacturer :

2. Hazards identification



Signal word: DANGER
Hazard Statement: 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 inhalative exposure.

According to 67/548/EEG resp.199/45/EG

Signal word: HARMFUL
Risks R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R40 Limited evidence of a carcinogenic effect.
R42/43 May cause sensitization by inhalation and skin contact.
R48/20 Harmful: Danger of serious damage to health by prolonged exposure through inhalation.

Prevention: P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P285 In case of inadequate ventilation wear respiratory protection.
P233+403 Store in a well-ventilated place. Keep container tightly closed.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
S23.3 Do not breathe vapour/spray.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

3. Composition/Information on Ingredients

P-MDI (Content (W/W): 100 %)

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4. First-Aid Measures

General indications	: Immediately remove contaminated clothing.
If inhaled:	: Keep patient calm, remove to fresh air, seek medical attention.
On skin contact	: After contact with skin, wash immediately with plenty of water. Consult a doctor if skin irritation persists.
On contact with eyes	: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
On ingestion	: Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.
Note to physician:	
Hazards	: Symptoms can appear later.
Symptoms	: tightness in the chest, coughing, difficulty breathing.
Treatment	: Treat according to symptoms (decontamination, vital functions), no known specific antidote, administer corticosteroid dose aerosol to prevent pulmonary edema.

5. Fire-Fighting Measures

Suitable extinguishing media for liquid resin, such as warehousing:
Dry extinguishing media, Alcohol resistant foam, carbon dioxide (CO₂), water spray (large quantities).

Suitable extinguishing filler when cured, such as cable joint:
Dry extinguishing media, carbon dioxide (CO₂), water spray (large quantities).

Do not use extinguishing media: water jet

At fire or overheating can be released:
Hydrogen cyanide (HCN), carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x)

Special firefighting protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.
Do not breathe fumes which come off from explosion and/or fire.

Additional information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
Take in contaminated firefighting water separately, may not end up in sewage, surface water or wastewater flow.

6. Accidental release measures

Precaution measures for persons	: Use personal protective clothing. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol.
Occurrence of gases / vapors	: Use breathing apparatus if exposed to vapours/dust/aerosol.
Environmental precautions	: Do not empty into drains. Do not discharge into the subsoil/soil.
Containment and cleaning up methods	: For large amounts: Pump off product. For residues: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations. Neutralize with a solution of 5 - 10 % Sodium carbonate, 0,2 - 2 % detergents and 90 - 95 % water.
Disposal	: Do not seal the packaging of waste disposed due pressurisation (CO ₂)

7. Handling and storage

Ensure thorough ventilation of stores and work areas.
Avoid inhalation of vapours, never spray the product.
No eating, drinking, smoking or tobacco use at the place of work.

In Keep package tightly closed in a dry, cool and well ventilated place.

Temporary storage temperature	: -10°C max. +50°C
Storage temperature	: +10°C max. -35°C

8. Exposure Controls/Personal Protection

Components with workplace control parameters

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101-68-8 : Diphenylmethane-4,4'-diisocyanate (MDI)
TGG waarde (8 uren) : 0,05 mg/m³ ; 0,005 ppm (MAC (NL))
KTG waarde (15 minuten) : 0,21 mg/m³ ; 0,02 ppm (MAC (NL))

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment within the scope. When exposed to concentrations above the MAC value, adequate, approved respiratory protection Use.
Hand protection : gloves of rubber or plastic.
Eye protection : safety glasses with side-shields (frame goggles).
Body protection : Safety shoes, closed working cloths.

General safety and hygiene measures

: Ensure thorough ventilation.
: Do not breathe vapour/spray.
: Avoid contact with skin, eyes and clothing.
: No eating, drinking, smoking or tobacco use at the place of work.
: Take off immediately contaminated clothing.
: Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form : Liquid
Colour : Black / brown
Odour : Earthy, musty

After mixing of the components: Expansion and then polymerization of the mixture and a small amount of heat will be released, the product will become fixed foam.

Melting point : < 10 °C
Boiling range : 330 °C
Flashpoint : 204 °C
Thermische ontleding : > 230 °C
Ignition temperature : > 600 °C
Vapour pressure : < 0,01 Pa (25°C)
Relative density : > 1 g/cm³
Viscosity : > 100 mPa.s (25°C)
Solubility in water : Hardener component reacts slowly with water at the interface to insoluble polyurea with high melting point. In this reaction, CO₂ is being formed. Cured product is insoluble in water.

10. Stability and reactivity

The product is stable under the prescribed storage conditions. When processing a polymerization reaction is created where heat is released.

Circumstances to avoid : Do not heat because thermal decomposition can occur.
Formation of CO₂ after mixing with water.
Incompatible materials : Acids, logen on water.
Hazardous decomposition products : No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Acute toxicity
After a single ingestion: : Virtually nontoxic

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After a single skin contact : Virtually non toxic
After short-term inhalation: : Moderate toxicity

LD50/oral/rat : > 10.000 mg/kg
LD50/dermal/konijn : > 10.000 mg/kg
LC50/inhalation/rat : approx. 0,500 mg/l 4h

Primary skin contact : Irritation
Primary eye contact : irritation
Sensitisation : may cause sensitisation by inhalation and skincontact.
STOT : May cause respiratory irritation.
Do not breath aerosols of MDI.

Experiences in humans:

MDI may, depending on concentration lead to strong irritation of the eyes and respiratory tract. At prolonged exposure of the product: skin and mucous membrane irritation possible.
Repeated intensive contact may cause sensitization to the skin and / or respiratory system.

Further information:

Carcinogenic effects have so far only been detected in animals following prolonged exposure to aerosolized MDI.
With proper handling, within the operating limits are as yet no known adverse effects with the product

12. Ecological information

Mobility: The products hardens to a solid immobile substance.

Bioaccumulation: Accumulation is not expected.

Degradability: The product is not readily biodegradable.

Water hazard classification: WGK1

13. Instructions for disposal

Fluids : Uncured product must be treated as hazardous waste (reaction increased risk for pressure), according to the local government regulations.
Fixed substances : fully cured product can be disposed as normal waste in conformity with local government regulations.

14. Transport information

Not classified as a dangerous good under transport regulations.

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ADR, RID, ADNR, IMDG/GGVSee, ICAO/IATA

15. Regulatory information

Contains	: P-MDI (isocyanat)
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P271	: Use only outdoors or in a well-ventilated area
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P285	: In case of inadequate ventilation wear respiratory protection.
P233+403	: Store in a well-ventilated place. Keep container tightly closed.
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16. Other information

This product is for professional use for sealing (wall-) penetrations. After mixing the two components occurs on a combination of reactions: The content expands and then hardens off. At elevated temperatures these reactions occur may accelerated. This information data is based on our present knowledge and describes our product with a view about security at use. This data is not a guaranteed specification.

In addition to the mandatory information, we recommend the following safety measures:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314	Get Medical advice/attention if you feel unwell.