

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name:

Polyurethane resin P2600, P2654, P2662

Chemical name : P-MDI

CAS-number : 9016-87-9

Reach reg.nrs. : 01-2119457024-46

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

Use:

Insulating and sealing

Unsuitable use:

Spraying

### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Filoform B.V

Postbus 2

NL-4190 CA Geldermalsen

T: +31 (0)345 588220

E: [info@filoform.com](mailto:info@filoform.com)

W: [www.filoform.com](http://www.filoform.com)

### 1.4 Emergency telephone number

The UK National Poisons Emergency number is 0870 600 6266

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to directive (EG) nr. 1272/2008 [CLP]

Acute tox. 4

Eye Irrit. 2

Skin Irrit. 2

STOT SE 3

Skin Sens. 1

Resp Sens. 1

Carc. 2

STOT RE 2

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 if inhaled. (see chapter 11)
H373	May cause damage to organs through prolonged or repeated exposure.

## 2.2 Label elements

Labelling according to directive (EG) nr. 1272/2008

Hazard pictograms:



GHS07 GHS08

Signal word: Danger.

### Hazard statements:

H315	Causes skin irritation.
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H335	May cause respiratory irritation.
H351	Suspected of causing cancer if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements:

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with 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.
P401	Store locked up, in closed packaging, in a well-ventilated place.

### Non-label elements:

P285	In case of inadequate ventilation wear respiratory protection.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Hazardous components for labelling: DIPHENYLMETHANEDIISOCYANATE, ISOMERES UND HOMOLOGUES

## 2.3 Other hazards

Mixing of the components gives expansion and generates heat.

## 3. Composition/information on ingredients

### 3.1 Substances

### 3.2 Mixtures

Contains :P-MDI	CAS-number: 9016-87-9	10 – 30 %
Mixture of polyols		70 – 90 %

## 4. First aid measures

### 4.1 Description of first aid measures

#### After inhalation:

Supply fresh air and call for a doctor.

#### After skin contact:

Immediately wash with water and soap and rinse thoroughly. If symptoms persist consult a doctor.

#### After eye contact:

Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse mouth immediately and then drink plenty of water, avoid vomiting, consult a doctor.

**4.2 Most important symptoms and effects, both acute and delayed**

Dangers:

Symptoms may be delayed.

Symptoms:

Tightness in the chest, coughing and breathing difficulties.

**4.3 Indication of any immediate medical attention and special treatment needed**

To treat the symptoms no specific antidote is known. The contamination, monitoring of vital functions.

To prevent pulmonary edema: corticosteroid-containing metered dose inhaler.

## 5. Firefighting measures

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**5.1 Extinguishing media**

Suitable extinguishing media:

Powder or water spray and CO<sub>2</sub>.

Unsuitable extinguishing media:

Water with full jet.

**5.2 Special hazards arising from the substance or mixture**

In case of fire or overheating:

Hydrogen cyanide (HCN), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), isocyanate.

**5.3 Advice for firefighters:**

Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

Do not inhale gases from explosion, fire or overheating.

**Additional information**

Cool threatening packaging with water spray. Fire residues and contaminated extinguishing water in accordance with local regulations when handling waste. Contaminated extinguishing water separately, do not allow into drains, surface water or effluent.

## 6. Accidental release measures

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**6.1 Personal precautions, protective equipment and emergency procedures**

General:

Ventilate and wear personal protective clothing.

When gases/vapours arise:

Wear respiratory protection.

**6.2 Environmental precautions**

Do not allow unmixed material to enter sewers/ surface or ground water.

**6.3 Methods and material for containment and cleaning up**

Clean-up procedures:

Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Disposal:

Treating liquids as chemical waste. Treating solids as household waste.

#### 6.4 Reference to other sections food stuff

Information regarding exposure route (H351) in Section 2.2, is located in section 11.

Information regarding exposure controls, personal protection and disposal considerations can be found in section 8 and 13.

## 7. Handling and storage

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### 7.1 Precautions for safe handling

Take care of a good ventilation of storage and workplace.

Processing temperature 0°C to + 35°C. Product not used for other purposes than intended.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in closed packaging, in a dry and well-ventilated place.

Short term, between: **-10°C until + 50°C**

Storage for a long term, between: **+15 until +25°C**

### 7.3 Specific end use(s)

Sealing and insulating.

## 8. Exposure controls/personal protection

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### 8.1 Control parameters

Components with limit values that require monitoring at the workplace:

Not required

Continuous repetitive movements and work in unventilated areas:

101-68-8: 4,4'-METHYLENEDIPHENYL DIISOCYANATE

TGG value ( 8hours )            20 ug/m<sup>3</sup> (Workplace Exposure Limit UK)

TGG value (15 minutes )        50 ug/m<sup>3</sup> (DFG 2008 Germany)

PNEC

Is not applicable.

DNEL

Is not applicable.

### 8.2 Exposure controls

General protection and hygiene measures:

- Avoid breathing vapour and mist.
- Avoid contact with skin, eyes and clothing.
- Do not eat, drink or smoke at work.
- Remove contaminated clothing immediately.
- Before breaks and at the end of the working day wash hands thoroughly.
- Keep away from food and drinks.

#### 8.2.1 Appropriate engineering controls

Only use in a well ventilated area.

#### 8.2.2 Individual protection measures, such as personal protective equipment

Respiratory protection:

No personal respiratory protective equipment required within the scope. With inadequate ventilation use suitable respiratory protection

Hand protection:

Impermeable gloves of rubber or plastics.

Eye/face protection:

Safety glasses with side-shields.

Skin protection:

Safety shoes, closed working clothes.

### 8.2.3 Environmental exposure controls

The two components package requires careful handling.

Fluids should be carefully collected and be treated as hazardous waste.

Mixed product forms an inert substance and has no environmental objections.

**Additional Information:**

Occupational exposure:

The major risk with repeated (skin) contact is getting an allergy (hypersensitivity) to one or

several components. Once developed allergies, allergic reactions may occur with each subsequent (skin) contact with isocyanates.

To strictly follow the "Exposure controls/personal protection" the occurrence of hypersensitivity may be limited.

## 9. Physical and chemical properties

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### 9.1.1 General properties

Colour:

Black/brown

Form:

liquid

Odour:

Smells like earth, musty.

### 9.1.2 Information on basic physical and chemical properties

Melting point/freezing point:

< 10 °C

Initial boiling point and boiling range:

330 °C (1.013 mbar)

Flash point:

> 204 °C

Evaporation rate:

Value can be estimated on the basis of the Henry's Law constant of or on the vapour pressure.

Flammability (solid, gas):

Non-flammable.

Upper/lower flammability or explosive limits:

For these fluids are not relevant for classification and labelling.

Ignition temperature:

> 600 °C

Vapour pressure at 25°C:

< 0,01 Pa

Relative density:

ca. 1,22 (20°C)

Partition coefficient: n-octanol/water:

N/A

Relative vapour density at 20°C:

8,5

Solubility in water:

Hardener component reacts slowly with water at the interface to insoluble polyurea with high melting point. In this reaction, CO<sub>2</sub> is released. Cured product is inert and insoluble in water.

Viscosity at 25°C:

>200 mPa.s

Explosive properties:

Not explosive.

Oxidising properties:

Not oxidising.

## 9.2 Other information

Miscibility with water:

Reacts with water.

Other information:

If necessary, the information on other physical and chemical parameters listed in this section.

## 10. Stability and reactivity

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### 10.1 Reactivity

No hazardous reactions if the regulations / notes for storage and handling are followed.  
Upon mixing of the components expansion occurs, the volume will increase factor of 10.

### 10.2 Chemical stability

The product is stable, if the regulations / notes for storage and handling are followed.

### 10.3 Possibility of hazardous reactions

Reactions with water with formation of carbon dioxide. Do not mix with other chemicals.

### 10.4 Conditions to avoid

Conditions to avoid:

None, if the regulations / notes for storage and handling are followed.

### 10.5 Incompatible materials

Materials to avoid:

Acids, alcohols, amines, water and alkalis.

### 10.6 Hazardous decomposition products

No hazardous decomposition products, if the regulations / notes for storage and handling are followed.

## 11. Toxicological information

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### 11.1 Information on toxicological effects

Acute toxicity:

After a single ingestion and contact with skin and practically non-toxic. Moderate toxicity after short-term inhalation

LD<sub>50</sub> rat (oral) : > 10.000 mg/kg

LC<sub>50</sub> rat (inhalatoir) : ca 0,500 mg/l 4h

LD<sub>50</sub> rabbit (dermal) : > 10.000 mg/kg

Skin corrosion/irritation:

Irritating to eyes and skin

Sensibility of the respiratory system and skin:

The substance has a sensitizing effect on the respiratory system and skin.

Germ cell mutagenicity:

The substance exhibited in various test systems microorganisms and cell cultures a modifying effect on the genetic material, however, in experiments on mammals could not be confirmed.

Carcinogenicity:

Indications of possible carcinogenic effect in animal experiments. However, the relevance of the results to humans is not confirmed. The substance is long-term tested as respirable aerosol.

Reproductive toxicity:

Repeated inhalation uptake of the substance did not cause damage to the reproductive organs.

STOT-single exposure:

May be irritating to the respiratory system.

STOT-repeated exposure:

The substance may cause on the basis of experimental studies on animals by repeated inhalation of small amounts of damage to the lungs.

Aspiration hazard:

No aspiration hazard expected.

## 12. Ecological information

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### 12.1 Toxicity

With high probability unarmful to aquatic organisms. No toxic effects in the aquatic environments.

### 12.2 Persistence and degradability

Non-biodegradable.

### 12.3 Bio accumulative potential

Concentrates negligible in organisms.

### 12.4 Mobility in soil

Adsorption to solid soil is not expected.

### 12.5 Results of PBT and vPvB assessment

N/A

### 12.6 Other adverse effects

The product does not contain substances from Annex I to Regulation (EC) 2037/2000 on ozone depleting substances.

Additional information:

The product does not contains halogens.

Other Eco toxicological advice:

Unmixed product: Do not release untreated into natural waters.

## 13. Disposal considerations

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### 13.1 Waste treatment methods

Cured product residue and the resin packing can be treated as household waste.

Plastics and the carton can be recycled.

Treating liquids as chemical waste in accordance with local authority requirements.

## 14. Transport information

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Not classified as a dangerous goods under transport regulations: ADR, RID, ADNR, IMDG/GGVSee, ICAO/IATA

### 14.1 UN number

N/A

### 14.2 UN proper shipping name

N/A

### 14.3 Transport hazard class(es)

N/A

### 14.4 Packing group

N/A

### 14.5 Environmental hazards

N/A

### 14.6 Special precautions for use

N/A

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

N/A

### Special precautions for transport

Hazard map:

No hazard map required.

Hazard symbol:

None

Different goods with different identification numbers are packaged within the limited quantities in a single package.  
The substances and their packaging meets section 3.4 of the ADR / RID / ADNR

## 15. Regulatory information

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

If other legal rules that are not mentioned elsewhere in this safety data sheet, then it is described in this subsection.

### 15.2 Chemical safety assessment

N/A

## 16. Other information

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Full text of H and P phrases referred to under sections 2 and 3.

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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 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.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Legal Disclaimer:

This product is intended for filling, sealing and fixing. Always use the manufacturer's instructions. Local laws and regulations should be the recipient of the product on its own responsibility are met. The above information is believed to be correct but does not purport to be complete. Filoform is not responsible for any damage resulting from handling or contact with the above product.

This safety data is made on 24-06-2015 and prepared in accordance with Regulation (EC) No. 453/2010

Status: Final