

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 09.01.2008

Revision: 09.01.2008

* 1 Identification of substance

- **Product details**

- Trade name **JOWATHERM Reaktant 607.40**

- **Article number:** 60740

- **Application of the substance / the preparation** Adhesives

- **Manufacturer/Supplier:**

- Jowat AG

- Ernst-Hilker-Strasse 10 - 14 D - 32758 Detmold

- Tel.: +49 (0) 5231-749-0 Fax: +49 (0) 5231-749-104

- email: info@jowat.de; website: www.jowat.de

- **Department providing the information:**

- Environment Protection Department

- Fon: +49 (0)5231-749-211 Fax: +49 (0)5231-749-236

- e-mail: jan-peter.boelcke@jowat.de

- **Emergency information:**

- InfraServ Hoechst - Gefahrenabwehrmeldezentrale

- D - 65926 Frankfurt

- Fon: +49 (0)69-305-6418

* 2 Hazards identification

- **Hazard designation:**

- Xn Harmful

- **Specific information on particular dangers for man and the environment**

- The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- R 42/43 May cause sensitisation by inhalation and skin contact.

- Contains isocyanates. See information supplied by the manufacturer.

- **Classification system**

- The classification is in line with current EC lists. It is supplemented, however, with information from technical literature and by information furnished by supplier companies.

- **GHS label elements**

- Health hazard **Danger**

- 3.4/1 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

- 3.4/1 - May cause an allergic skin reaction.

- **Prevention:**

- Avoid breathing dust/fume/gas/mist/vapours/spray.

- Contaminated work clothing should not be allowed out of the workplace.

- Wear protective gloves/protective clothing/eye protection/face protection.

- In case of inadequate ventilation wear respiratory protection.

- **Response:**

- IF ON SKIN: Wash with plenty of soap and water.

- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

- Specific treatment (see label).

- If skin irritation or rash occurs: Get medical advice/attention.

- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

- Wash contaminated clothing before reuse.

- **Disposal:**

- Dispose of contents/container in accordance with local/regional/national/international regulations.

* 3 Composition/information on ingredients

- **Chemical characterization**

- **Description:**

- Adhesive.

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(polyurethanes)

· Dangerous components:

CAS: 26447-40-5 EINECS: 247-714-0	methylenediphenyl diisocyanate Xn, Xi; R 20-36/37/38-42/43 ----- Danger: Health hazard 3.4.R/1, 3.2/2, 3.3/2A, 3.4.S/1 ----- Warning: Exclamation mark 3.1.I/4, 3.8/3	1- 5%
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· Additional information

If any R-phrases (risk-phrases) are listed, please refer for the exact wording to section 16.

4 First aid measures**· After inhalation**

Supply fresh air and contact physician for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· After skin contact

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product away from the skin.

Seek medical treatment.

· After eye contact Rinse opened eye for several minutes under running water.**· After swallowing** In case of persistent symptoms consult physician.**· Information for physician****· The following symptoms may occur:**

Asthma attacks

Allergic reactions

5 Firefighting measures**· Suitable extinguishing agents**CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.**· Protective equipment:**

Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

*** 6 Accidental release measures****· Safety precautions/operators or staff:** Ensure adequate ventilation**· Measures for environmental protection:** No special measures required.**· Measures for cleaning/collecting:**

Dispose of contaminated material as waste according to item 13.

Collect mechanically.

Allow to solidify. Collect mechanically.

Ensure adequate ventilation.

*** 7 Handling and storage****· Handling****· Information for safe handling:**

Store in cool, dry place in tightly closed containers.

Ensure good ventilation/extraction system at the workplace.

Ensure that suitable extractors are available on processing machines

· Information about protection against explosions and fires: No special measures required.

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· Storage

- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store under dry conditions.
Protect from humidity and keep away from water.

* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring in the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 - **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
 - **General protective and hygienic measures**
Standard precautionary measures for handling chemicals are to be observed.
Keep away from food, beverages and animal feed.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid skin contact with the liquefied material.
 - **Breathing equipment:**
Use breathing protection in case of insufficient ventilation.
Short term filter device:
Filter A/P2.
 - **Protection of hands:** Heat resistant gloves
 - **Material of gloves**
Leather gloves
Strong gloves
 - **Penetration time of glove material** No special requirements.
 - **Eye protection:** Safety glasses recommended during refilling.

* 9 Physical and chemical properties:

· General Information	
· Form:	Solid.
· Colour:	According to product specification
· Smell:	Characteristic
· Change in condition	
· Melting point/Melting range:	Not determined
· Boiling point/Boiling range:	> 300°C
· Flash point:	> 220°C
· Ignition temperature:	450°C
· Spontaneous combustion:	Product does not undergo spontaneous combustion.
· Danger of explosion:	Product is not explosive.
· Density at 20°C	1.3 g/cm ³

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· Solubility in / Miscibility with	
· Water:	Unsoluble
· Solvent content:	
· Organic solvents:	0.0 %
· Solid content:	100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
- **Dangerous reactions**
Toxic fumes may be released if heated above the decomposition point
Reacts with water
Reacts with moist air
- **Dangerous products of composition:**
Nitrous vitriol gases
Isocyanate

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

26447-40-5 methylenediphenyl diisocyanate

Oral	LD50 oral	> 5000 mg/kg (rat)
Dermal	LD50 dermal	> 5000 mg/kg (rabbit)

- **Primary irritant effect:**
 - **to the skin:** No irritant effect.
 - **to the eye:** No irritant effect.
- **Sensitization:**
Sensitization possible by inhalation.
Sensitization possible by skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
 - **Sensitisation** May cause sensitisation by inhalation and skin contact.

*12 Ecological information:

- **Ecotoxicological effects:**

- **Aquatic toxicity:**

26447-40-5 methylenediphenyl diisocyanate

Biol. Abbau	0 % (n.a.)
EC50 / 24 h	> 1000 mg/l (daphnia magna)
EC50 / 3 h	> 100 mg/l (pseudomonas putida)
LC0	> 1000 mg/l (brachydanio rerio)

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- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow the product to reach ground water, open water or the sewer system, undiluted or in large quantities.

* 13 Disposal considerations

- **Product:**

- **Recommendation** Smaller quantities can be disposed with household garbage.

- **European waste catalogue**

08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
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- **Uncleaned containers/packaging material:**

- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.

* 14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

- **ADR/RID-GGVS/E Class:** Not dangerous according to the above specifications.

- **Maritime transport IMDG/GGVSea:**

- **Marine pollutant:** No

- **Transport/Additional information:** Not dangerous according to the above specifications.

* 15 Regulatory information

- **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

- **Code and hazard designation of product:**



Xn Harmful

- **Components for labelling identifying hazards:**

methylenediphenyl diisocyanate

- **Risk phrases:**

42/43 May cause sensitisation by inhalation and skin contact.

- **Safety phrases:**

23 Do not breathe fumes.

24 Avoid contact with skin.

37 Wear suitable gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

- **Special designation of certain preparations:**

Contains isocyanates. See information supplied by the manufacturer.

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***16 Other information:**

These data are based on our present knowledge. They shall, however, not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

All standard industrial precautions apply, concerning protection of health, and safe handling. The recommendations have to be examined in the context of the application for which the product is intended, and observed as necessary.

- **Relevant R-phrases**

- 20 Harmful by inhalation.

- 36/37/38 Irritating to eyes, respiratory system and skin.

- 42/43 May cause sensitisation by inhalation and skin contact.

- **Department issuing data specification sheet:** Environment protection department.

- **Contact:** Jan-Peter Boelcke

- **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

- RID: Reglement internationale concernent le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

- IMDG: International Maritime Code for Dangerous Goods

- GHS: Globally Harmonized System of Classification and Labelling of Chemicals

- LD50: Lethal dose, 50 percent

- *** Data modified in comparison to the previous version.**

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