

Safety data sheet according to UK REACH Regulation

Printing date 19.01.2023

Version number 27 (replaces version 26)

Revision: 19.01.2023

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

- **1.1 Product identifier**
 - Trade name **Jowat Toptherm 236.50**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - **Application of the substance / the mixture**
 - Adhesives
 - Additive
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
 - Jowat SE
 - Ernst-Hilker-Str. 10 - 14; D - 32758 Detmold
 - Fon +49 (0)5231 749 0
 - e-mail: info@jowat.de
 - www.jowat.de
 - **Department issuing data specification sheet:**
 - Environmental management
 - Tel. +49 5231 749 -218 / -211 / -5460 / -5374
 - e-mail: umweltmanagement@jowat.de
 - **Department providing the information:**
 - Jowat UK Ltd.
 - Lymedale Business Centre
 - Lymedale Business Park
 - Hooters Hall Road
 - Newcastle-under-Lyme
 - Staffordshire
 - ST5 9QF
 - Phone: +44 1782 565265
 - E-mail: nick.orton@jowat.co.uk
- **1.4 Emergency telephone number:**
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Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008** not applicable
 - **Hazard pictograms** not applicable
 - **Signal word** not applicable
 - **Hazard statements** not applicable
 - **Additional information:**
Contains maleic anhydride. May produce an allergic reaction.
Safety data sheet available on request.
- **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
 - **Description:** Hot melt adhesive

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· Dangerous components:		
CAS: 108-31-6 EINECS: 203-571-6 registration number: 01-2119472428-31	maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	<0.001%

· **Additional information**

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

SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **After inhalation** Supply fresh air; consult physician in case of symptoms.· **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.· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**· **Suitable extinguishing agents**CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.· **5.2 Special hazards arising from the substance or mixture**

Can be released in case of fire

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

· **5.3 Advice for firefighters**· **Protective equipment:** Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

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

Wear protective clothing.

· **6.2 Environmental precautions:** No special measures required.· **6.3 Methods and material for containment and cleaning up:**

Collect mechanically.

Allow to solidify. Collect mechanically.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

No dangerous materials are released.

* SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Store in cool, dry place in tightly closed containers.

Use only in well ventilated areas.

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

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· 7.2 Conditions for safe storage, including any incompatibilities

· 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:** None.

· 7.3 Specific end use(s) No further relevant information available.

* SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with critical values that require monitoring in the workplace:

108-31-6 maleic anhydride

WEL	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³ Sen
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· **Regulatory information** WEL: EH40/2020

· **Additional information:** The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Additional information about design of technical systems:** No further data; see item 7.
- **Individual protection measures, such as 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.
Vacuum clean contaminated clothing. Do not blow or brush off contamination.
Avoid skin contact with the liquefied material.
Do not eat or drink while working.
 - **Breathing equipment:** Not necessary if room is well-ventilated.
 - **Hand protection** Heat resistant gloves
 - **Material of gloves**
Leather gloves
Strong gloves
 - **Penetration time of glove material** No special requirements.
 - **Eye/face protection** Not required.

* SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

- **Physical state** Solid.
- **Colour:** According to product specification
- **Smell:** Characteristic
 - **Odour threshold:** Not determined.
- **Melting point/freezing point:** Not determined
- **Boiling point or initial boiling point and boiling range** Not determined
- **Flammability** Product is not inflammable.
- **Lower and upper explosion limit**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Flash point:** >200 °C
- **Ignition temperature:** >380 °C
- **Decomposition temperature:** > 250 °C
- **pH** Not applicable.

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<ul style="list-style-type: none"> · Viscosity: · Kinematic viscosity · dynamic: · Solubility · Water: · Partition coefficient n-octanol/water (log value) · Vapour pressure: · Density and/or relative density · Density at 20 °C · Relative density · Vapour density 	<ul style="list-style-type: none"> Not applicable. Not applicable. Unsoluble Not determined. Not applicable. < 0,01 hPa 0.87 g/cm³ Not determined. Not applicable.
<ul style="list-style-type: none"> · 9.2 Other information · VOC - Volatile Organic Compounds · European Union · Switzerland · U.S.A (less water and less exempts) · Appearance: · Form: · Important information on protection of health and environment, and on safety. · Spontaneous combustion: · Explosive properties: · Solvent content: · Organic solvents: · Solid content: · Change in condition · Evaporation rate 	<ul style="list-style-type: none"> 0.01 % 0.01 % 0.1 g/l / 0.00 lb/gal Solid. Product does not undergo spontaneous combustion. Product is not explosive. 0.0 % 100.0 % Not applicable.
<ul style="list-style-type: none"> · Information with regard to physical hazard classes · Explosives · Flammable gases · Aerosols · Oxidising gases · Gases under pressure · Flammable liquids · Flammable solids · Self-reactive substances and mixtures · Pyrophoric liquids · Pyrophoric solids · Self-heating substances and mixtures · Substances and mixtures, which emit flammable gases in contact with water · Oxidising liquids · Oxidising solids · Organic peroxides · Corrosive to metals · Desensitised explosives 	<ul style="list-style-type: none"> not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.

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- **10.3 Possibility of hazardous reactions**
Toxic fumes may be released if heated above the decomposition point
No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Inflammable gases/vapours
Carbon monoxide and carbon dioxide
Danger of toxic pyrolysis products

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

108-31-6 maleic anhydride

Oral	LD50 oral	481 mg/kg (rat)
Dermal	LD50 dermal	2,620 mg/kg (rabbit)

- **to the skin:** Based on available data, the classification criteria are not met.
- **to the eye:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients is listed.

* SECTION 12: Ecological information

- **12.1 Toxicity**
 - **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
 - **Additional ecological information:**
 - **General notes:** Generally not hazardous for water.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Smaller quantities can be disposed with household garbage.
Can be reused without processing.
 - **Uncleaned containers/packaging material:**
 - **Recommendation:**
Non contaminated packagings can be reused.
Non contaminated packagings can be used for recycling.

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Packaging with cured adhesive residues can be recycled.
Packaging with cured adhesive residues can be treated as household waste.

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, ADN, IMDG, IATA	not applicable
· 14.2 UN proper shipping name · ADR · ADN, IMDG, IATA	not applicable not applicable not applicable
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	not applicable
· 14.4 Packing group · ADR, IMDG, IATA	not applicable
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	not applicable

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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 phrases**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H372 Causes damage to organs through prolonged or repeated exposure.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

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