

Safety data sheet

according to 1907/2006/EC, Article 31; (EU) 2020/878

Printing date 05.10.2024

Version number 11 (replaces version 10)

Revision: 27.09.2024

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

- **1.1 Product identifier**
 - Trade name **Jowatherm® 282.21**
- **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
- **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 -5374 / -218 / -5460 / -5592
e-mail: umweltmanagement@jowat.de
 - **Department providing the information:**
Environmental management
Fon: +49 5231 749 -5374 / -218 / -5460 / -5592
e-mail: umweltmanagement@jowat.de
- **1.4 Emergency telephone number:**
-
InfraServ Hoechst - Gefahrenabwehrmeldezentrale
D - 65926 Frankfurt
Fon: +49 (0)69-305-6418

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
The product does not meet the criteria for classification according to Regulation (EC) 1272/2008.
The creation of a safety data sheet is therefore not mandatory. This document is prepared as a voluntary and additional service to provide general safety information.
- **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:**
Safety data sheet available on request.
Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.
- **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
Ethylene vinyl acetate copolymer
Vinyl resin
 - **Dangerous components:** not applicable
 - **SVHC** Not applicable.
 - **Additional information**
If any R-phrases (risk-phrases) are listed, please refer for the exact wording to section 16.

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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.

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.
- **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:**
 - **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
 - **Additional information about design of technical systems:** No further data; see section 7.

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- **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:** 80 °C
 - **Boiling point or initial boiling point and boiling range** 301 °C
 - **Flammability** Product is not inflammable.
 - **Lower and upper explosion limit**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
 - **Flash point:** 186 °C
 - **Auto-ignition temperature:** 298 °C
 - **Decomposition temperature:** > 250 °C
 - **pH** Not applicable.
 - **Viscosity:**
 - **Kinematic viscosity** Not applicable.
 - **dynamic:** Not applicable.
 - **Solubility**
 - **Water:** Insoluble
 - **Partition coefficient n-octanol/water (log value)** Not determined.
 - **Vapour pressure:** Not applicable.
< 0,01 hPa
 - **Density and/or relative density**
 - **Density at 20 °C** 1.3 g/cm³
 - **Relative density** Not determined.
 - **Vapour density** Not applicable.
 - **Particle characteristics** See section 3.

· 9.2 Other information

- **VOC - Volatile Organic Compounds**
 - **European Union** 0.00 %
 - **Switzerland** 0.00 %
 - **U.S.A (less water and less exempts)** 0.0 g/l / 0.00 lb/gal
- **Appearance:**
 - **Form:** Solid.

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<ul style="list-style-type: none"> · Important information on protection of health and environment, and on safety. 	
<ul style="list-style-type: none"> · Spontaneous combustion: 	Product does not undergo spontaneous combustion.
<ul style="list-style-type: none"> · Explosive properties: 	Product is not explosive.
<ul style="list-style-type: none"> · Solvent content: 	
<ul style="list-style-type: none"> · Solid content: 	100.0 %
<ul style="list-style-type: none"> · Change in condition 	
<ul style="list-style-type: none"> · Evaporation rate 	Not applicable.
<ul style="list-style-type: none"> · Information with regard to physical hazard classes 	
<ul style="list-style-type: none"> · Explosives 	not applicable
<ul style="list-style-type: none"> · Flammable gases 	not applicable
<ul style="list-style-type: none"> · Aerosols 	not applicable
<ul style="list-style-type: none"> · Oxidising gases 	not applicable
<ul style="list-style-type: none"> · Gases under pressure 	not applicable
<ul style="list-style-type: none"> · Flammable liquids 	not applicable
<ul style="list-style-type: none"> · Flammable solids 	not applicable
<ul style="list-style-type: none"> · Self-reactive substances and mixtures 	not applicable
<ul style="list-style-type: none"> · Pyrophoric liquids 	not applicable
<ul style="list-style-type: none"> · Pyrophoric solids 	not applicable
<ul style="list-style-type: none"> · Self-heating substances and mixtures 	not applicable
<ul style="list-style-type: none"> · Substances and mixtures, which emit flammable gases in contact with water 	not applicable
<ul style="list-style-type: none"> · Oxidising liquids 	not applicable
<ul style="list-style-type: none"> · Oxidising solids 	not applicable
<ul style="list-style-type: none"> · Organic peroxides 	not applicable
<ul style="list-style-type: none"> · Corrosive to metals 	not applicable
<ul style="list-style-type: none"> · Desensitised explosives 	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.
- **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
Ethanoic acid

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:** void
 - **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.

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- **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	
96-69-5	6,6'-di-tert-butyl-4,4'-thiodi-m-cresol
	List II

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** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
 - **Additional ecological information:**
 - **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.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Smaller quantities can be disposed with household garbage.
Can be reused without processing.

· European waste catalogue	
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging

- **Uncleaned containers/packaging material:**
 - **Recommendation:**
Dispose of packaging according to regulations on the disposal of packagings.
Non contaminated packagings can be reused.
Non contaminated packagings can be used for recycling.
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
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	not applicable

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· 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.
· UN "Model Regulation":	not applicable

SECTION 15: Regulatory information

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

None of the ingredients is listed.

- **REGULATION (EC) No 1907/2006 ANNEX XVII** None of the ingredients is listed.

· **Regulation (EU) No 649/2012 (PIC)**

None of the ingredients is listed.

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **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.

- **Date of previous version:** 04.07.2024

- **Version number of previous version:** 10

· **Abbreviations and acronyms:**

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

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

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