Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

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

· 1.1 Product identifier

- · Trade name Jowatherm 280.31
- · 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:

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 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:

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

Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

Trade name Jowatherm 280.31

(Contd. from page 1)

Vinyl resin

· Dangerous components:		
	titanium dioxide substance with a Community workplace exposure limit	2.5-<5%

· 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:

Wear self-contained breathing apparatus.

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.

Ensure that suitable extractors are available on processing machines. In the context of the risk assessment, it is necessary to evaluate whether and to what extent protective measures are required. If necessary, a workplace measurement has to be carried out.

(Contd. on page 3)

Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

Trade name Jowatherm 280.31

(Contd. from page 2)

- · 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.
 - · Storage class 11
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
 - · Additional information about design of technical systems: No further data; see item 7.
- Components with critical values that require monitoring in the workplace:

 13463-67-7 titanium dioxide

 WEL Long-term value: 10* 4** mg/m³

 *total inhalable **respirable
 - · Regulatory information WEL: EH40/2020
 - · 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 item 7.
 - · 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.
- · Protection of hands: Heat resistant gloves
 - Material of gloves Leather gloves
 - Strong gloves
 - · Penetration time of glove material No special requirements.
- · Eye protection: Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties **General Information** Appearance: · Form: Solid. · Colour: According to product specification · Smell: Characteristic · Odour threshold: Not determined. pH-value: Not applicable. · Change in condition **Melting point/freezing point:** 90 °C Initial boiling point and boiling range: >300 °C · Flash point: >220 °C · Inflammability (solid, gaseous) Product is not inflammable. · Ignition temperature: >250 °C

Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

Trade name Jowatherm 280.31

(Contd. from page 3)

	, , , ,
Decomposition temperature:	> 250 °C
· Spontaneous combustion:	Product does not undergo spontaneous combustion.
· Explosive properties:	Product is not explosive.
· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	<0.1 hPa
	< 0,01 hPa
· Density at 20 °C	1.02 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Unsoluble
· distribution ratio (n-octanol/water):	Not determined.
· Viscosity:	
· dynamic:	Not applicable.
· kinematic:	Not applicable.
· Solvent content:	
· Solid content:	100.0 %
· 9.2 Other information	
	3
· Switzerland	0.00 %
VOC - Volatile Organic Compounds	

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:

Carbon monoxide

Inflammable gases/vapours

Carbon monoxide and carbon dioxide

Danger of toxic pyrolysis products

Ethanoic acid

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
 - · Acute toxicity Based on available data, the classification criteria are not met.

· LD/	· LD/LC50 values that are relevant for classification:	
13463-6	13463-67-7 titanium dioxide	
Oral	LD50 oral	>6,000 mg/kg (rat)
Dermal	LD50 dermal	>10,000 mg/kg (rabbit)

Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

Trade name Jowatherm 280.31

(Contd. from page 4)

· Primary irritant effect:

- 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.
- · Additional toxicological information:
 - · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
 - 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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aq	Aquatic toxicity:	
1346	3-67-7 titanium dioxide	
LC0	>1,000 mg/l (orfe (ide))	
EC0	>3 mg/l (water flea)	
	>10,000 mg/l (pseudomonas putida)	

- · 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.
 - 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 quantites.

· 12.5 Results of PBT and vPvB assessment

- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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.

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 · ADR, ADN, IMDG, IATA	not applicable
· 14.2 UN proper shipping name · ADR	not applicable
· ADN, IMDG, IATA	not applicable not applicable

(Contd. on page 6)

Printing date 29.09.2022 Version number 34 Revision: 29.09.2022

Trade name Jowatherm 280.31

(Contd. from page 5)

	, , ,
· 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: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.	
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	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 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.

· 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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

* Data modified in comparison to the previous version.