Printing date 11/27/2019

Version number 1

Reviewed on 11/27/2019

1 Identification

Product identifier Trade name: Jowatherm 286.80 Application of the substance / the mixture Adhesives Details of the supplier of the safety data sheet

Manufacturer/Supplier: Jowat Corporation 6058 Lois Lane Archdale, NC 27263 Phone: 336-434-9000 Fax: 336-434-9019 info@jowat.com · Department issuing SDS: Environmental management Tel. +49 5231 749 -218 / -211 / -270 e-mail: umweltmanagement@jowat.de · Information provided by department: Jowat Corporation 5608 Uwharrie Rd. Archdale, NC 27263 P.O.Box 1368 High Point, NC 27261 Tel.: +1 336 434-9000 Fax: +1 336 434-9019 E-Mail: info@jowat.com

• Emergency telephone number: 1 800 424 9300 (Chemtrec 24 hours service)

2 Hazard(s) identification

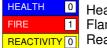
• Classification of the substance or mixture The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
 - · GHS label elements Void
 - · Hazard pictograms Void
 - Signal word Void
 - · Hazard statements Void
- Classification system
 - NFPA ratings (scale 0-4)



Health = 0 Fire = 1 Reactivity = 0

· HMIS ratings (scale 0-4)



Health = 0Flammability = 1Reactivity = 0

- · Other hazards
 - · Results of PBT and vPvB assessment
 - **PBT:** Not applicable.
 - · vPvB: Not applicable.

(Contd. on page 2)

Printing date 11/27/2019

Version number 1

Trade name: Jowatherm 286.80

(Contd. of page 1)

3 Composition/information on ingredients

· Chemical characterization: Mixtures

- \cdot **Description:** Hot melt adhesive
- · Dangerous components: Void

4 First-aid measures

· Description of first aid measures

- · General information No special measures required.
- After inhalation Supply fresh air; consult physician in case of problems.

• After skin contact

- Generally the product does not irritate the skin.
- After contact with the molten product, cool rapidly with cold water.

Do not peel solidified product from the skin.

- Seek medical treatment.
- · After eye contact Rinse opened eye for several minutes under running water.
- After swallowing If symptoms persist consult physician.
- Information for physician
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

· Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents Water in a full jet.
- \cdot Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

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

Advice for firefighters

· Protective equipment: Do not inhale explosion gases or combustion gases.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Particular danger of slipping on leaked/spilled product.
- · Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Pick up mechanically.
- Allow to solidify. Pick up mechanically.
- 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 disposal information.

(Contd. on page 3)

Printing date 11/27/2019

Version number 1

Trade name: Jowatherm 286.80

(Contd. of page 2)

7 Handling and storage

- · Handling
 - · Precautions for safe handling

Store in cool, dry place in tightly closed containers.

Ensure that suitable extractors/ventilation systems are available on processing machines and in the workplace. 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.

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

· Conditions for safe storage, including any incompatibilities

- Storage
 - Requirements to be met by storage facilities and containers: No special requirements.
 - · Information concerning mixed product storage facilities: Not required.
- · Further information on storage conditions: None.
- · Storage class 11

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

8 Exposure controls/personal protection

· Control parameters

Components with limit 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 at the date of compilation of this SDS were used as basis.

· Exposure controls

· Personal protective equipment

General protection and hygiene precautions

The standard precautionary measures for handling chemicals should be observed. Wash hands before 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.

- 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.

9 Physical and chemical properties

Information on basic physical General Information Appearance:	and chemical properties
· Form:	Solid.
Color: Odor:	According to product specification Characteristic
· Odor threshold:	Not determined.

(Contd. on page 4)

Printing date 11/27/2019

Version number 1

Reviewed on 11/27/2019

Trade name: Jowatherm 286.80

	(Contd. of page 3)
· pH-value:	Not applicable.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	undetermined 351 °C (663.8 °F)
· Flash point:	201 °C (393.8 °F)
· Flammability (solid, gaseous)	Not determined.
· Decomposition temperature:	> 220 °C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
 Explosion limits: Lower: Upper: 	Not determined. Not determined.
· Vapor pressure:	Not applicable.
 Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate 	1.73 g/cm ³ (14.44 lbs/gal) Not determined. Not applicable. Not applicable.
 Solubility in / Miscibility with Water: 	Insoluble
· Partition coefficient (n-octanol/water)	: Not determined.
 Viscosity: dynamic: kinematic: 	Not applicable. Not applicable.
· Solvent content:	
Solid content: Other information VOC - Volatile Organic Compounds	100.0 % No further relevant information available.
• European Union • Switzerland • U.S.A (less water and less exempts	0.00 % 0.00 %) 0.0 g/l / 0.00 lb/gal

10 Stability and reactivity

· Reactivity No further relevant information available.

Chemical stability

• Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

To avoid thermal decomposition do not overheat.

Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point No dangerous reactions known

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

(Contd. on page 5)

Printing date 11/27/2019

Version number 1

Trade name: Jowatherm 286.80

(Contd. of page 4)

 Hazardous decomposition products: Flammable gases/vapors

Carbon monoxide and carbon dioxide Danger of toxic pyrolysis products

11 Toxicological information

· Information on toxicological effects

- · Acute toxicity:
 - · LD/LC50 values that are relevant for classification: not applicable
 - · Primary irritant effect:
 - on the skin: No irritant effect.
 - on the eye: No irritating effect.
 - · Sensitization: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations (Directive 1999/45/EC of the European Parliament and of the Council) as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

Toxicity

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - · Mobility in soil No further relevant information available.

· Additional ecological information:

· General remarks:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Prevent undiluted product or product in large amounts to reach ground water, open waters or sewer systems.

· Results of PBT and vPvB assessment

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

13 Disposal considerations

Waste treatment methods

Recommendation

Smaller quantities can be disposed of with household waste.

Reviewed on 11/27/2019

(Contd. of page 5)

Printing date 11/27/2019

Version number 1

Trade name: Jowatherm 286.80

Can be reused without reprocessing.

· Uncleaned containers/packaging materials:

· 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.

14 Transport information · UN-Number · DOT, ADR, ADN, IMDG, IATA Void · UN proper shipping name DOT, ADR, ADN, IMDG, IATA Void Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class Void Packing group DOT, ADR, IMDG, IATA Void · Environmental hazards: Not applicable. · Special precautions for user Not applicable. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · UN "Model Regulation": Void

^{*}15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture

 SARA Section 355 (extremely hazardous substances) 	
None of the ingredients is listed.	
· SARA Section 313 (specific toxic chemical listings)	
None of the ingredients is listed.	
· TSCA (Toxic Substances Control Act)	
All components have the value ACTIVE.	

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males

None of the ingredients is listed.

(Contd. on page 7)

Printing date 11/27/2019

Version number 1

Trade name: Jowatherm 286.80

(Contd. of page 6)

Chemicals known to cause developmental toxicity

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present state of information. 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 preparation / last revision 11/27/2019 / -

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) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL: Recommended Exposure Limit**

• * Data in paragraphs with asterisk are revised in comparison to the previous version.