

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/19/2016

Version number 1

Reviewed on 12/19/2016

* 1 Identification

- **Product identifier**
 - **Trade name:** JOWAT HIGHTHERM 221.00
 - **Article number:** 22100U
 - **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
Ellen Lange / Tina Friedrich / Jan-Peter Boelcke
Fon +49 5231 749 218 / 270 / 211
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

- **HMS ratings (scale 0-4)**

HEALTH	0
FIRE	1
REACTIVITY	0

Health = 0
Flammability = 1
Reactivity = 0

· Other hazards

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

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
 - **Description:**
Polypropylene modification

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Hot melt adhesive
polyolefine

- **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**
Immediately wash with water and soap and rinse thoroughly.
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.
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Under certain fire conditions, traces of other toxic gases cannot be excluded.
Carbon monoxide (CO)
- **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:**
Do not allow product to reach sewer system or open water.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, general-purpose binders, sawdust).
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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

9002-88-4	Polyethylene low density	16 mg/m ³
108-31-6	maleic anhydride	0.2 ppm
34590-94-8	(2-methoxymethylethoxy)propanol	150 ppm
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	30 mg/m ³

- **PAC-2:**

9002-88-4	Polyethylene low density	170 mg/m ³
108-31-6	maleic anhydride	2 ppm

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34590-94-8	(2-methoxymethylethoxy)propanol	1700* ppm
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	330 mg/m3

· PAC-3:

9002-88-4	Polyethylene low density	1,000 mg/m3
108-31-6	maleic anhydride	20 ppm
34590-94-8	(2-methoxymethylethoxy)propanol	9900** ppm
126-86-3	2,4,7,9-tetramethyldec-5-yne-4,7-diol	2,000 mg/m3

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** 10

- **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.

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.

- **The following materials are unsuitable for gloves:**

Leather gloves

Strong gloves

- **Eye protection:** Goggles recommended during refilling an spraying.

* 9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:

- **Form:** Fluid

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· Color:	According to product specification
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
· Melting point/Melting range:	undetermined
· Boiling point/Boiling range:	351 °C (664 °F)
· Flash point:	173 °C (343 °F)
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	> 300 °C (> 572 °F)
· Decomposition temperature:	> 220 °C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density:	Not determined
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· dynamic:	Not determined.
· kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	0.0 %
· Solid content:	99.7 %
· Other information	No further relevant information available.
· 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/gl

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.
- **Hazardous decomposition products:**
Flammable gases/vapors

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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)**

Polyethylene low density	3
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- **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**

Must not be disposed of together with household garbage. Do not allow product to reach sewer system.

- **Uncleaned containers/packaging materials:**

- **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

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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

· 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) (Substances not listed) All ingredients are 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.
· Chemicals known to cause developmental toxicity None of the ingredients is listed.
· Carcinogeny 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

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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** 12/19/2016 / -

· **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.**