Printing date 11/27/2019

Version number 1

Reviewed on 11/27/2019

1 Identification

Product identifier Trade name: <u>Jowat-Hightherm 225.00</u>

· 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) 1 800 424 9300 (Chemtrec 24 hours service)

2 Hazard(s) identification

· Classification of the substance or mixture

GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms



· Signal word Warning

- **Hazard-determining components of labeling:** 6,6'-di-tert-butyl-4,4'-thiodi-m-cresol
- · Hazard statements
- H317 May cause an allergic skin reaction.
- · Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray

(Contd. on page 2)

Version number 1

Reviewed on 11/27/2019

Trade name: Jowat-Hightherm 225.00

(Contd. of page 1)

- P280 Wear protective gloves.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

· Classification system

Printing date 11/27/2019

NFPA ratings (scale 0-4)



· HMIS ratings (scale 0-4)



Health = 0Flammability = 1Reactivity = 0

· Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description:

Hot melt adhesive Polypropylene modification polyolefine

· Dangerous components:

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

<0.5%

Additional information

In case any risk phrases are listed, please refer to paragraph 16 for the exact wording.

4 First-aid measures

\cdot Description of first aid measures

· After inhalation

Supply fresh air and call in physician to be on the safe side. In case of unconsciousness place patient in stable side position for transportation. Supply fresh air; consult physician in case of problems.

After skin contact

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.

(Contd. on page 3)

Printing date 11/27/2019

Version number 1

Trade name: Jowat-Hightherm 225.00

(Contd. of page 2)

• 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 alcoholresistant foam.
 For safety reasons unsuitable extinguishing agents Water in a full jet.
 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 evaluated

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 Wear protective clothing.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13. Pick up mechanically. Allow to solidify. Pick up mechanically. Ensure adequate ventilation.
- 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.

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.

(Contd. on page 4)

Printing date 11/27/2019

Version number 1

Trade name: Jowat-Hightherm 225.00

(Contd. of page 3)

8 Exposure controls/personal protection

· Control parameters

Components with limit values that require monitoring in the workplace:								
	96-69-5 6,6'-di-tert-butyl-4,4'-thiodi-m-cresol							
PEL	Long-term value: 15* 5** *total dust **respirable fra							
REL	Long-term value: 10* 5** *total dust **respirable fra							
TLV	Long-term value: 1 mg/m							
 Regulatory information PEL: Guide to Occupational Exposure Values (OSHA PELs) REL: Guide to Occupational Exposure Values (NIOSH RELs) TLV: Guide to Occupational Exposure Values (ACGIH) Additional information: The lists that were valid at the date of compilation of this SDS were used as basis. 								
 Ihe 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. Keep away from food, beverages and animal feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Vacuum clean contaminated clothing. Do not blow or brush off contamination. Do not inhale gases / fumes / aerosols. 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. 								
9 Physical and chemical properties								
Ge	mation on basic physica neral Information Appearance: Form:	al and chemical properties Solid.						
. c	Color: Ddor:	According to product specification Characteristic						
· C	Odor threshold:	Not determined.						

Not applicable.

· pH-value:

(Contd. on page 5)

Printing date 11/27/2019

Version number 1

Reviewed on 11/27/2019

Trade name: Jowat-Hightherm 225.00

	(Contd. of page 4)				
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	undetermined 351 °C (663.8 °F)				
· Flash point:	173 °C (343.4 °F)				
· Flammability (solid, gaseous)	Not determined.				
· 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: Upper:	Not determined. Not determined.				
· Vapor pressure:	Not applicable.				
 Density: Relative density Vapor density Evaporation rate 	Not determined 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 No VOC - Volatile Organic Compounds	100.0 % o 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 6)

Version number 1

Printing date 11/27/2019

(Contd. of page 5)

3

Trade name: Jowat-Hightherm 225.00

• 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:

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

Oral LD50 oral 2,345 mg/kg (rat)

Primary irritant effect:

- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers 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: Irritant

· Carcinogenic categories

IARC (International Agency for Research on Cancer)

Polyethylene low density

· 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:

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

LC50 / 96 h 0.16 mg/l (rainbow trout)

EC50 / 48 h 0.7 mg/l (water flea)

EC50 / 72 h 126 mg/l (green algae)

• 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: Generally not hazardous for water.
- Results of PBT and vPvB assessment
 - · **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

Printing date 11/27/2019

Version number 1

Trade name: Jowat-Hightherm 225.00

(Contd. of page 6)

13 Disposal considerations

· Waste treatment methods

Recommendation

Smaller quantities can be disposed of with household waste. 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, ADN, IMDG, IATA ADR 	Void Void 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)
All components have the value ACTIVE.
· Hazardous Air Pollutants
None of the ingredients is listed.

(Contd. on page 8)

Printing date 11/27/2019

Version number 1

Trade name: Jowat-Hightherm 225.00

· Proposition 65

(Contd. of page 7)

A4

· Prop 65 -	Chemicals	known to	cause cancer
	Onennouis		

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.

· Cancerogenity categories

• EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

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

• 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 Skin Sens. 1: Skin sensitisation - Category 1

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