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

- · 1.1 Product identifier
 - · Trade name Jowatherm 213.46

· Article number: 21346

· 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:

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· Department issuing data specification sheet:

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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 CLP regulation.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC void
 - · Information concerning particular hazards for human and environment:

According to the calculation of the "General Classification guideline for preparations of the EU" (Directive 1999/45/EC of the European Parliament and of the Council) in the latest valid version, the product is not subject to labelling requirements.

- · 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
- · 2.3 Other hazards
 - · REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL; ANNEX XVII

void

- · 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

Polyurethane resin

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· Dangerous components: not applicable

SECTION 4: First aid measures

- 4.1 Description of first aid measures
 - · General information No special measures required.
 - · After skin contact

The product does not irritate the skin.

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.

· 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

Particular danger of slipping on leaked/spilled product.

- 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.

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

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· 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
- · Components with critical 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 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.

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.

- · 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 a General Information Appearance:	nd chemical properties
· Form:	Solid.
· Colour:	According to product specification
· Smell:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	150 °C Not determined
· Flash point:	393 °C
· Inflammability (solid, gaseous)	Not determined.
· Ignition temperature:	ab 407 °C
· Decomposition temperature:	Not determined.
· Spontaneous combustion:	Product does not undergo spontaneous combustion.

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		(Contd. from page
· Danger of explosion:	Product is not explosive.	
· Critical values for explosion	:	
· Lower:	Not determined.	
· Upper:	Not determined.	
· Vapour pressure:	Not applicable.	
· Density at 20 °C	1,2 g/cm ³	
· Relative density	Not determined.	
Vapour density	Not applicable.	
 Evaporation rate 	Not applicable.	
· Solubility in / Miscibility witl	1	
· Water:	Unsoluble	
· distribution ratio (n-octanol/	water): Not determined.	
· Viscosity:		
· dynamic:	Not applicable.	
· kinematic:	Not applicable.	
· Solvent content:		
· Organic solvents:	0,0 %	
· Solid content:	100,0 %	
9.2 Other information	No further relevant information available.	
· VOC - Volatile Organic Com	pounds	
· European Union	0,00 %	
Switzerland	0,00 %	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity
- · 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: Hydrocarbons

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
 - · Acute toxicity:
 - · LD/LC50 values that are relevant for classification: void
 - · Primary irritant effect:
 - to the skin: No irritant effect.to the eye: No irritant effect.
 - · Sensitisation: No sensitizing effect known.

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· Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EC 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.

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.
 - · Additional ecological information:
 - · General notes: Generally not hazardous for water.
- · 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.
 - · European waste catalogue

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

- · Uncleaned containers/packaging material:
 - · Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

SECTION 14: Transport information		
· 14.1 UN-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	
· 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 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.		

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UN "Model Regulation":

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:

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

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

 \cdot * Data modified in comparison to the previous version.

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