Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

1 Identification

Product identifier

· Application of the substance / the mixture Dispersion glue

· Details of the supplier of the safety data sheet

· Trade name: JOWAPUR 150.51

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.

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

Archdale, NC 27263

\cdot 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)

0 0 0 Health = 0Fire = 0 Reactivity = 0

· HMIS ratings (scale 0-4)

HEALTHImage: OFIREImage: OREACTIVITYReactivityReactivityO

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

3 Composition/information on ingredients

- Chemical characterization: Mixtures
 Description:
 - aqueous polymer emulsion Polyurethane resin

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

(Contd. of page 1)

· Dangerous components: Void

4 First-aid measures

· Description of first aid measures

· General information No special measures required.

· After skin contact

Immediately wash with water and soap and rinse thoroughly.

- Generally the product does not irritate the skin.
- 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 Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture

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

- Advice for firefighters
 Brotactive againment: Do not inhole explosion gases of
 - Protective equipment: Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

· 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).

- 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

acetone	200 ppm
titanium dioxide	30 mg/m3
Alcohols, C16-18, ethoxylated	3.8 mg/m3
2,2'-oxybisethanol	6.9 ppm
propane-1,2-diol	30 mg/m3
ethanole	1,800 ppm
sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	4.1 mg/m3
4-methyl-m-phenylene diisocyanate	0.020 ppm
formaldehyde	0.90 ppm
1-vinyl-2-pyrrolidone	0.15 ppm
vinyl acetate	6.7 ppm
dibutyltin di(acetate)	0.59 mg/m3
ethyl acrylate	8.3 ppm
acetone	3200* ppm
	Alcohols, C16-18, ethoxylated 2,2'-oxybisethanol propane-1,2-diol ethanole sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen 4-methyl-m-phenylene diisocyanate formaldehyde 1-vinyl-2-pyrrolidone vinyl acetate dibutyltin di(acetate) ethyl acrylate

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

		(Contd. of page 2)
	titanium dioxide	330 mg/m3
68439-49-6	Alcohols, C16-18, ethoxylated	42 mg/m3
111-46-6	2,2'-oxybisethanol	140 ppm
57-55-6	propane-1,2-diol	1,300 mg/m3
64-17-5	ethanole	3300* ppm
7631-99-4	sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	45 mg/m3
584-84-9	4-methyl-m-phenylene diisocyanate	0.083 ppm
50-00-0	formaldehyde	14 ppm
88-12-0	1-vinyl-2-pyrrolidone	6.3 ppm
108-05-4	vinyl acetate	36 ppm
1067-33-0	dibutyltin di(acetate)	6.5 mg/m3
140-88-5	ethyl acrylate	36 ppm
· PAC-3:		·
67-64-1	acetone	5700* ppm
13463-67-7	titanium dioxide	2,000 mg/m3
68439-49-6	Alcohols, C16-18, ethoxylated	250 mg/m3
111-46-6	2,2'-oxybisethanol	860 ppm
57-55-6	propane-1,2-diol	7,900 mg/m3
64-17-5	ethanole	15000* ppm
7631-99-4	sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen	270 mg/m3
584-84-9	4-methyl-m-phenylene diisocyanate	0.51 ppm
50-00-0	formaldehyde	56 ppm
50 00 0		1
	1-vinyl-2-pyrrolidone	31 ppm
88-12-0	1-vinyl-2-pyrrolidone vinyl acetate	31 ppm 180 ppm
88-12-0 108-05-4		

7 Handling and storage

· Handling

· Precautions for safe handling

Store in cool, dry place in tightly closed containers.

Prevent formation of aerosols.

· 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:
 - Protect from frost.

Keep container tightly sealed.

- · Storage class 12
- · 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.

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

A shallthan all infamma attain.

(Contd. of page 3)

· 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.
 - · Breathing equipment:

Has to be worn only if no adequate extraction system is operating when sprayed. Filter A/P2

Not necessary if room is well-ventilated.

- · Protection of hands: Not required.
 - · Material of gloves Plastic gloves
- Penetration time of glove material
 - Please contact the glove manufacturer for the exact time of penetration/resistance level and observe this limit.
- In case of permanent contact in work areas where the risk of injury is low (e.g. labs) gloves made of the following material are suitable: Plastic gloves
- In case of permanent contact, gloves made of the following materials are suitable: Plastic gloves
- 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 ch General Information	nemical properties
· Appearance: · Form:	Fluid
· Color:	White
· Odor:	Characteristic
 Odor threshold: 	Not determined.
· pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range:	undetermined 100 °C (212 °F)
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	>550 °C (>1022 °F)
· Decomposition temperature:	Not determined.
· 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 at 20 °C (68 °F):	23 hPa (17 mm Hg)
 Density at 20 °C (68 °F): Relative density Vapor density 	1.1 g/cm³ (9.18 lbs/gal) Not determined. Not determined.

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

		(Contd. of page 4
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
· Water:	Fully miscible	
· Partition coefficient (n-octanol/wat	ter): Not determined.	
· Viscosity:		
· dynamic:	Not determined.	
· kinematic:	Not determined.	
· Solvent content:		
 Organic solvents: 	0.8 %	
· Solid content:	40.5 %	
 Other information 	No further relevant information available.	
· VOC - Volatile Organic Compound	S	
· European Union	0.78 %	
Switzerland	0.69 %	
 U.S.A (less water and less exem) 	ots) 3.1 g/l / 0.03 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.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:
--

55965-84-9 mixture of methylchloroisothiazolinone and methylisothiazolinone

Oral LD50 oral	67 mg/kg (rat)
----------------	----------------

Inhalative LC50 / 4 h 0.17 mg/l (rat)

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) 	
titanium dioxide	2B
· NTP (National Toxicology Program)	
None of the ingredients is listed	

None of the ingredients is listed.

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

(Contd. of page 5)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

 Aquatic 	toxicity:

55965-84-9 mixture of methylchloroisothiazolinone and methylisothiazolinone	
LC50 / 96 h	0.32 mg/l (bluegill sunfish)
	0.22 mg/l (rainbow trout)
EC50 / 48 h	0.12 mg/l (water flea)
EC50 / 3 h	7.92 mg/l (activated sludge)
EC50	0.043 mg/l (n.a.)
EC50 / 72 h	0.048 mg/l (green microalgae) (SPO12089)
NOEC	0.035 mg/l (water flea)

• 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.

Ecotoxical effects:

· Behavior in sewer plants:

55965-84-9 mixture of methylchloroisothiazolinone and methylisothiazolinone

EC20 / 0,5 h 0.97 mg/l (activated sludge)

· 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.

• Recommended cleaning agent: Water, if necessary with cleaning agents.

14 Transport information		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
 · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA 	Void	

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

		(Conto. of page of
 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 Anno MARPOL73/78 and the IBC Code 	ex II of 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 		
13463-67-7 titanium dioxide		
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)		
acetone		
· TLV (Threshold Limit Value established by ACGIH)		
67-64-1	acetone	A4
13463-67-7	titanium dioxide	A4
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
titanium dioxide		

· 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 03/02/2017 / -
- · 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)

Printing date 03/02/2017

Version number 1

Reviewed on 03/02/2017

Trade name: JOWAPUR 150.51

(Contd. of page 7)

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.