

21.01.2023

Kit Components

Product code	Description
69000	Jowat 690.00 690.01 + 690.02

Components:

69002	Jowat 690.02
69001	Jowat 690.01

Safety data sheet

according to UK REACH Regulation

Printing date 21.01.2023




Version number 53 (replaces version 52)

Revision: 21.01.2023

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

- **1.1 Product identifier**
 - Trade name **Jowat 690.02**
- **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
Epoxy resin adhesive
 - **Uses advised against** Restricted to professional users.
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
JOWAT Swiss AG
Chemische & Leimfabrik
CH - 6033 Buchrain
Tel.: +41 (0)41-445 1111
 - **Department issuing data specification sheet:**
Environmental management
Tel. +49 5231 749 -218 / -211 / -5460 / -5374
e-mail: umweltmanagement@jowat.de
 - **Department providing the information:**
Jowat UK Ltd.
Lymedale Business Centre
Lymedale Business Park
Hooters Hall Road
Newcastle-under-Lyme
Staffordshire
ST5 9QF
Phone: +44 1782 565265
E-mail: nick.orton@jowat.co.uk
- **1.4 Emergency telephone number:**
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
-  health hazard
 Repr. 1A H360 May damage fertility or the unborn child.
-
-  environment
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
-
- 
- Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
-

- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 1)

· Hazard pictograms



GHS07 GHS08 GHS09

· Signal word Danger

· Hazard-determining components of labelling:

epoxy resin MW<700
Tetrabutylidilauryldistannoxane
epoxy resins MW<700

· Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H360 May damage fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P501 Dispose of contents / container to approved waste disposal or recycling in accordance with national regulations.

· Additional information:

Restricted to professional users.
Contains epoxy constituents. May produce an allergic reaction.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description:

Adhesive.
Epoxy resin

· Dangerous components:

CAS: 25068-38-6 NLP: 500-033-5 registration number: 01-2119456619-26	epoxy resin MW<700 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317, EUH205 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	35-<50%
CAS: 25085-99-8 EC number: 691-646-8	epoxy resins MW<700 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-<35%
CAS: 9003-36-5 NLP: 500-006-8 registration number: 01-2119454392-40	Bisphenol F epoxy resin Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	5-<10%
CAS: 68609-97-2 EINECS: 271-846-8 registration number: 01-2119485289-22	Dodecyl/tetradecyl glycidyl ether Skin Irrit. 2, H315; Skin Sens. 1, H317	5-<10%

(Contd. on page 3)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 2)

CAS: 3669-02-1 EINECS: 222-931-3 registration number: 01-2120765349-42	Tetrabutylidilauryldistannoxane Muta. 2, H341; Repr. 1A, H360; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	0.5-<1%
--	--	---------

- **Additional information**

If any R-phrases (risk-phrases) are listed, please refer for the exact wording to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **After inhalation**

Supply fresh air and contact physician for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

- **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult physician.

- **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**

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing.

- **6.2 Environmental precautions:**

Do not allow product to reach sewage system or water bodies.

Inform respective authorities in case product reaches water or sewage system.

Prevent from spreading (e.g. by damming-in or oil barriers).

- **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **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.

* SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed containers.

- **Information about protection against explosions and fires:** Keep breathing equipment ready.

(Contd. on page 4)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and containers:** Prevent any penetration into the ground.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **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**
 - **Appropriate engineering controls** No further data; see item 7.
 - **Additional information about design of technical systems:** No further data; see item 7.
 - **Individual protection measures, such as personal protective equipment**
 - **General protective and hygienic measures**
Standard precautionary measures for handling chemicals are to be observed.
Keep away from food, beverages and animal feed.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
 - **Breathing equipment:** Not required.
 - **Hand protection** Impervious gloves (EN 374).
 - **Material of gloves**
Recommended thickness of the material: ≥ 0.5 mm
Nitrile rubber, NBR
Natural rubber, NR
 - **Penetration time of glove material** Value for the permeation: Level ≤ 6
 - **Gloves made of the following material are suitable for the permanent contact with this material in work areas which do not have an above-average risk of injury (e.g. laboratories):**
Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
Chloroprene rubber, CR
 - **For the permanent contact gloves made of the following materials are suitable:**
Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
Chloroprene rubber, CR
 - **Not suitable are gloves made of the following materials:**
Leather gloves
Strong gloves
 - **Eye/face protection**
Safety glasses recommended during refilling and spraying.
Safety glasses

* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
 - **General Information**
 - **Physical state** Fluid
 - **Colour:** Black

(Contd. on page 5)

Safety data sheet

according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 4)

<ul style="list-style-type: none"> · Smell: · Odour threshold: · Melting point/freezing point: · Boiling point or initial boiling point and boiling range · Flammability · Lower and upper explosion limit <ul style="list-style-type: none"> · Lower: · Upper: · Flash point: · Ignition temperature: · Decomposition temperature: · pH · Viscosity: <ul style="list-style-type: none"> · Kinematic viscosity · dynamic at 20 °C: · Solubility <ul style="list-style-type: none"> · Water: · Partition coefficient n-octanol/water (log value) · Vapour pressure at 20 °C: · Density and/or relative density <ul style="list-style-type: none"> · Density at 20 °C · Relative density · Vapour density 	<ul style="list-style-type: none"> Characteristic Not determined. Not determined Not determined Not applicable. Not determined. Not determined. >110 °C >300 °C Not determined. Not determined. Not determined. Not determined. 40,000 mPas Not miscible or difficult to mix Not determined. 0.8 hPa 1.28 g/cm³ Not determined. Not determined.
<ul style="list-style-type: none"> · 9.2 Other information · VOC - Volatile Organic Compounds <ul style="list-style-type: none"> · European Union · Switzerland · U.S.A (less water and less exempts) · Appearance: <ul style="list-style-type: none"> · Form: · Important information on protection of health and environment, and on safety. <ul style="list-style-type: none"> · Spontaneous combustion: · Explosive properties: · Solvent content: <ul style="list-style-type: none"> · Organic solvents: · Solid content: · Change in condition <ul style="list-style-type: none"> · Evaporation rate 	<ul style="list-style-type: none"> 0.06 % 0.00 % 0.8 g/l / 0.01 lb/gal Pasty Product does not undergo spontaneous combustion. Product is not explosive. 0.1 % 100.0 % Not determined.
<ul style="list-style-type: none"> · Information with regard to physical hazard classes <ul style="list-style-type: none"> · Explosives · Flammable gases · Aerosols · Oxidising gases · Gases under pressure · Flammable liquids · Flammable solids · Self-reactive substances and mixtures · Pyrophoric liquids · Pyrophoric solids · Self-heating substances and mixtures · Substances and mixtures, which emit flammable gases in contact with water 	<ul style="list-style-type: none"> not applicable not applicable not applicable not applicable not applicable not applicable not applicable not applicable not applicable not applicable not applicable not applicable

(Contd. on page 6)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 5)

· Oxidising liquids	not applicable
· Oxidising solids	not applicable
· Organic peroxides	not applicable
· Corrosive to metals	not applicable
· Desensitised explosives	not applicable

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and alkali
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Inflammable gases/vapours
Carbon monoxide and carbon dioxide
Small quantities of formaldehyde may be formed

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

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

25068-38-6 epoxy resin MW<700

Oral | LD50 oral | 19,800 mg/kg (rabbit)

68609-97-2 Dodecyl/tetradecyl glycidyl ether

Oral | LD50 oral | 19,200 mg/kg (rat)

- **to the skin:** Causes skin irritation.
- **to the eye:** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Reproductive toxicity** May damage fertility or the unborn child.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

* SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

25068-38-6 epoxy resin MW<700

LC50 / 96 h | 3.1 mg/l (fathead minnow)

EC50 / 48 h | 1.4 mg/l (water flea)

IC50 / 48 h | >42 mg/l (pseudomonas putida)

9003-36-5 Bisphenol F epoxy resin

EC50 / 24 h | 3.2 mg/l (water flea)

EC50 / 72 h | 1.8 mg/l (green algae)

68609-97-2 Dodecyl/tetradecyl glycidyl ether

LC50 / 96 h | >5,000 mg/l (rainbow trout)

EC50 / 48 h | 6.07 mg/l (water flea)

EC50 / 72 h | 843.7 mg/l (selenastrum capricornutum)

- **12.2 Persistence and degradability** No further relevant information available.

(Contd. on page 7)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02



(Contd. from page 6)

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
 - **Remark:** Toxic for fish
 - **Additional ecological information:**
 - **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.
Also poisonous for fish and plankton in water bodies.
The product contains materials that are harmful to the environment.
Toxic for aquatic organisms

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to disposers of hazardous waste.
 - **Uncleaned containers/packaging material:**
 - **Recommendation:**
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
Packaging with cured adhesive residues can be recycled.
Packaging with cured adhesive residues can be treated as household waste.
Packaging with uncured adhesive residues must be disposed of as hazardous waste.

SECTION 14: Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA | UN3082 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin MW<700)
3082 UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (Epoxidharze MG<700)
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin MW<700), MARINE POLLUTANT
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin MW<700) |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR | <div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class |
| | 9 (M6) Miscellaneous dangerous substances and articles. |

(Contd. on page 8)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023


Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 7)

· Label	9

· IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: Tetrabutylidilauryldistannoxane
· Marine pollutant:	No Yes
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kehler Number:	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

· Transport/Additional information:	

· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	(-)

· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN MW<700), 9, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Chemical safety assessment
 - Seveso category E2 Hazardous to the Aquatic Environment
 - Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
 - Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

(Contd. on page 9)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 53 (replaces version 52)

Revision: 21.01.2023

Trade name Jowat 690.02

(Contd. from page 8)

- **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.

- **Relevant phrases**

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H360 May damage fertility or the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- EUH205 Contains epoxy constituents. May produce an allergic reaction.

- **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord relatif au transport international 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
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1
- Muta. 2: Germ cell mutagenicity – Category 2
- Repr. 1A: Reproductive toxicity – Category 1A
- STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

- *** Data modified in comparison to the previous version.**

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

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

- **1.1 Product identifier**
 - Trade name **Jowat 690.01**
- **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
Epoxy resin adhesive
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
JOWAT Swiss AG
Chemische & Leimfabrik
CH - 6033 Buchrain
Tel.: +41 (0)41-445 1111
 - **Department issuing data specification sheet:**
Environmental management
Tel. +49 5231 749 -218 / -211 / -5460 / -5374
e-mail: umweltmanagement@jowat.de
 - **Department providing the information:**
Jowat UK Ltd.
Lymedale Business Centre
Lymedale Business Park
Hooters Hall Road
Newcastle-under-Lyme
Staffordshire
ST5 9QF
Phone: +44 1782 565265
E-mail: nick.orton@jowat.co.uk
- **1.4 Emergency telephone number:**
Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**



Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
 - **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
Aminoethylaminopropylmethyldimethoxysilane
- **Hazard statements**
H319 Causes serious eye irritation.

(Contd. on page 2)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 1)

H317 May cause an allergic skin reaction.

- **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents / container to approved waste disposal or recycling in accordance with national regulations.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:**

Adhesive.

Epoxy resin

- **Dangerous components:**

CAS: 90-72-2 EINECS: 202-013-9 registration number: 01-2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-<5%
CAS: 3069-29-2 EINECS: 221-336-6 registration number: 01-2119963926-21	Aminoethylaminopropylmethyldimethoxysilane Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317	≥2.5-<3%

- **Additional information**

If any R-phrases (risk-phrases) are listed, please refer for the exact wording to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **After inhalation**

Supply fresh air and contact physician for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

- **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult physician.

- **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**

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

(Contd. on page 3)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 2)

- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus.
Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or water bodies.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.

* SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed containers.
· **Information about protection against explosions and fires:** No special measures required.
- **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.
- **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**
· **Appropriate engineering controls** No further data; see item 7.
· **Additional information about design of technical systems:** No further data; see item 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures**
Standard precautionary measures for handling chemicals are to be observed.
Keep away from food, beverages and animal feed.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
· **Breathing equipment:** Not required.
· **Hand protection** Impervious gloves (EN 374).
· **Material of gloves**
Recommended thickness of the material: ≥ 0.4 mm
Nitrile rubber, NBR
Natural rubber, NR
· **Penetration time of glove material** Value for the permeation: Level ≤ 6

(Contd. on page 4)

Safety data sheet

according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 3)

- **Gloves made of the following material are suitable for the permanent contact with this material in work areas which do not have an above-average risk of injury (e.g. laboratories):**

Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
Chloroprene rubber, CR

- **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
Chloroprene rubber, CR

- **Not suitable are gloves made of the following materials:**

Leather gloves
Strong gloves

- **Eye/face protection**

Safety glasses recommended during refilling and spraying.
Safety glasses

* SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

· Physical state	Fluid
· Colour:	White
· Smell:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Not determined
· Boiling point or initial boiling point and boiling range	>200 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	225 °C
· Ignition temperature:	380 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· dynamic:	Not determined.
· Solubility	
· Water:	Not miscible or difficult to mix
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C	1.12 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

- **9.2 Other information**

- **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/gal

- **Appearance:**

· **Form:** Pasty

(Contd. on page 5)

Safety data sheet

according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 4)

<ul style="list-style-type: none"> · Important information on protection of health and environment, and on safety. · Spontaneous combustion: Product does not undergo spontaneous combustion. · Explosive properties: Product is not explosive. · Solvent content: · Solid content: 100.0 % · Change in condition · Evaporation rate Not determined. 	
<ul style="list-style-type: none"> · Information with regard to physical hazard classes · Explosives not applicable · Flammable gases not applicable · Aerosols not applicable · Oxidising gases not applicable · Gases under pressure not applicable · Flammable liquids not applicable · Flammable solids not applicable · Self-reactive substances and mixtures not applicable · Pyrophoric liquids not applicable · Pyrophoric solids not applicable · Self-heating substances and mixtures not applicable · Substances and mixtures, which emit flammable gases in contact with water not applicable · Oxidising liquids not applicable · Oxidising solids not applicable · Organic peroxides not applicable · Corrosive to metals not applicable · Desensitised explosives not applicable 	

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids and alkali
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
Inflammable gases/vapours
Carbon monoxide and carbon dioxide

* SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
 - **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Oral	LD50 oral	2,169 mg/kg (rat)
------	-----------	-------------------

3069-29-2 Aminoethylaminopropylmethyldimethoxysilane

Oral	LD50 oral	2,000 mg/kg (rat)
------	-----------	-------------------

Dermal	LD50 dermal	15,520 mg/kg (rabbit)
--------	-------------	-----------------------

- **to the eye:** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.

(Contd. on page 6)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 5)

· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

* SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

LC50 / 96 h | 175 mg/l (common carp)

EC50 / 72 h | 84 mg/l (green algae)

3069-29-2 Aminoethylaminopropylmethyldimethoxysilane

EC50 / 48 h | 100 mg/l (water flea)

· **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.

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow the product to reach ground water, open water or the sewer system, undiluted or in large quantities.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

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

Hand over to disposers of hazardous waste.

· Uncleaned containers/packaging material:

· Recommendation:

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

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

Packaging with cured adhesive residues can be recycled.

Packaging with cured adhesive residues can be treated as household waste.

Packaging with uncured adhesive residues must be disposed of as hazardous waste.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, ADN, IMDG, IATA

not applicable

· 14.2 UN proper shipping name

· ADR

not applicable

not applicable

· ADN, IMDG, IATA

not applicable

(Contd. on page 7)

Safety data sheet according to UK REACH Regulation

Printing date 21.01.2023

Version number 52 (replaces version 51)

Revision: 21.01.2023

Trade name Jowat 690.01

(Contd. from page 6)

· 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:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	not applicable

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.

- **Relevant phrases**

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.

- **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- ADR: Accord relatif au transport international 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
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- Skin Sens. 1: Skin sensitisation – Category 1

- *** Data modified in comparison to the previous version.**