



SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 1

Compilation date: 17/12/2015

Revision date: 16/05/2017

Revision No: 3

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

1.1. Product identifier

Product name: RIZISTAL SC290 - HARDENER

CAS number: 9016-87-9

Index number: 615-005-01-6

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Curing / Hardening component of Uragard Polyurethane Resins

1.3. Details of the supplier of the safety data sheet

Company name: John L Lord & Son Ltd.

Ainsworth Road

Bury

Lancashire

BL8 2RS

United Kingdom

Tel: +44 (0)161 764 4617

Fax: +44 (0)161 763 1873

Email: derrickhulett@john-lord.co.uk

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Chronic 3: H412; Skin Sens. 1: H317; STOT SE 3: H335

Most important adverse effects: May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. May cause respiratory irritation.

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 2

2.2. Label elements

Label elements:

Hazard statements: H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.
H335: May cause respiratory irritation.

Hazard pictograms: GHS07: Exclamation mark



Signal words: Warning

Precautionary statements: P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection.
P302+352: IF ON SKIN: Wash with plenty of water/.
P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a if you feel unwell.

2.3. Other hazards

Other hazards: Limited evidence of a carcinogenic effect.
Harmful by inhalation.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Irritating to eyes, respiratory system and skin.
May cause sensitisation by inhalation and skin co
PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 3

ALIPHATIC POLYISOCYANATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	-	-	-	>90%

HEXAMETHYLENE-DI-ISOCYANATE

212-485-8	822-06-0	-	Acute Tox. 3: H331; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Resp. Sens. 1: H334; Skin Sens. 1: H317	<1%
-----------	----------	---	--	-----

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor if skin irritation continues

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Ingestion: Do not induce vomiting. Wash out mouth with water. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Inhalation: Move to fresh air. Keep respiratory tract clear. If symptoms persist seek medical advice. If breathing has stopped or is laboured give assisted respiration (e.g. mouth to mouth). Prevent aspiration of vomit, turn victim's head to the side.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact. Sensitisation possible through skin contact.

Eye contact: There may be irritation and redness. There may be pain and redness.

Ingestion: No data available.

Inhalation: Irritating to the respiratory system coughing

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 4

wheezing and breathing difficulties

asthma

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

5.3. Advice for fire-fighters

Advice for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet and protective clothing should be worn. Due to reaction with water producing CO₂-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may burst if overheated.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Pr

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Do not discharge into the subsoil/soil. Keep away from drains, soils, surface & groundwaters.

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 5

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Wash the spillage site with large amounts of water.
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid aerosol formation Apply good manufacturing practice & industrial hygiene practices.
Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Wear protective goggles and gloves when handling material.
Clean cloths must be worn. Observe all warnings

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

HEXAMETHYLENE-DI-ISOCYANATE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 6

UK	0.02 mg/m ³	0.07 mg/m ³	-	-
----	------------------------	------------------------	---	---

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. Any respiratory protection or eye protection listed below (and hard hats) are only required when mixing the product and should not be used when floor laying as this would create additional risks.

Respiratory protection: Respiratory protection not required.

Hand protection: Chemical resistant protective gloves (EN 374)

Eye protection: Safety glasses with side-shields.

Skin protection: Protective clothing.

Environmental: Ensure all engineering measures mentioned in section 7 of SDS are in place.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Barely perceptible odour

Evaporation rate: Not available

Oxidising: Not available

Solubility in water: Not determined

Viscosity: Dynamic, 3,500 mPa.s at 23 °C

Boiling point/range°C: >300

Melting point/range°C: Not available.

Flammability limits %: lower: Not available

upper: Not available

Flash point°C: 192

Part.coeff. n-octanol/water: Not available

Autoflammability°C: Not available

Vapour pressure: 17 hPa at 20 °C

Relative density: 1.16 g/cm³ at 20 °C

pH: Not available.

9.2. Other information

Other information: No data available.

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 7

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions: Reaction with water (moisture) produces CO₂-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partner

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Water. Alcohols. Amines. Bases. Acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORL	RAT	LD50	49	gm/kg
SKN	RBT	LD50	>9400	mg/kg

Hazardous ingredients:

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 8

HEXAMETHYLENE-DI-ISOCYANATE

IVN	MUS	LD50	5600	µg/kg
ORL	MUS	LD50	350	mg/kg
ORL	RAT	LD50	710	µl/kg

Relevant hazards for product:

Hazard	Route	Basis
Respiratory/skin sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact. Sensitisation possible through skin contact.

Eye contact: There may be irritation and redness. There may be pain and redness.

Ingestion: No data available.

Inhalation: Irritating to the respiratory system coughing
wheezing and breathing difficulties
asthma

Delayed / immediate effects: No data available.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
DAPHNIA	24H Acute EC50	>1000	mg/l
DAPHNIA	Chronic NOEC	>10	mg/l
FISH	96H LC50	>1000	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 9

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

12.4. Mobility in soil

Mobility: Immiscible with water, but will
react with water to produce inert and non-biodegradable solids

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as normal industrial waste. May be reused following decontamination.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: Not regulated

14.2. UN proper shipping name

Shipping name: Not regulated

14.3. Transport hazard class(es)

Transport class: Not regulated

14.4. Packing group

Packing group: Not regulated

[cont...]

SAFETY DATA SHEET

RIZISTAL SC290 - HARDENER

Page: 10

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.