

SAFETY DATA SHEET

RIZISTAL TC210 - HARDENER

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Compilation date: 07/08/2015

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 TC210 - HARDENER

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

1.3. Details of the supplier of the safety data sheet

Company name: John L Lord & Son Ltd.

Unit 4

Park 66

Bury

Lancashire

BL9 8RZ

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: Acute Tox. 4: H302; Aquatic Chronic 2: H411; Skin Corr. 1B: H314; Skin Sens. 1: H317

Most important adverse effects: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark

GHS09: Environmental



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Signal words: Danger

Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P302+P352: IF ON SKIN: Wash with plenty of water.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

BENZYL ALCOHOL

| EINECS | CAS | PBT / WEL | CLP Classification | Percent |
|-----------|----------|-----------|--|---------|
| 202-859-9 | 100-51-6 | - | Acute Tox. 4: H332; Acute Tox. 4: H302 | 30-50% |

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE

| | | | | |
|-----------|-----------|---|--|-------|
| 220-666-8 | 2855-13-2 | - | Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412 | 1-10% |
|-----------|-----------|---|--|-------|

4,4'-ISOPROPYLIDENEDIPHENOL

| | | | | |
|-----------|---------|---|--|-------|
| 201-245-8 | 80-05-7 | - | Repr. 1B: H360F; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317 | 1-10% |
|-----------|---------|---|--|-------|

3-AMINOPROPYLDIMETHYLAMINE

| | | | | |
|-----------|----------|---|---|-------|
| 203-680-9 | 109-55-7 | - | Flam. Liq. 3: H226; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317 | 1-10% |
|-----------|----------|---|---|-------|

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

| | | | | |
|-----------|---------|---|--|-------|
| 202-013-9 | 90-72-2 | - | Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315 | 1-10% |
|-----------|---------|---|--|-------|

M-PHENYLENEBIS(METHYLAMINE)

| | | | | |
|-----------|-----------|---|--|-------|
| 216-032-5 | 1477-55-0 | - | Skin Sens. 1: H317; Skin Corr. 1B: H314; Acute Tox. 4: H302; Acute Tox. 4: H332; Aquatic Chronic 3: H412 | 1-10% |
|-----------|-----------|---|--|-------|

Section 4: First aid measures

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4.1. Description of first aid measures

- Skin contact:** Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
- Eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- Ingestion:** Drink copious amounts of water and provide fresh air. Instantly call for a doctor.
- Inhalation:** Take affected persons into the open air and position comfortably. Seek medical attention in case of complaints.

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

- Skin contact:** Causes severe skin burns. May cause an allergic skin reaction.
- Eye contact:** Causes serious eye damage.
- Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
- Inhalation:** There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
- Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Instantly remove any clothing soiled by the product.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: 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

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

5.3. Advice for fire-fighters

Advice for fire-fighters: Put on breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear protective clothing.

6.2. Environmental precautions

Environmental precautions: Do not allow product to reach sewage system or water body. Do not allow the product to enter the ground / soil.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

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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: The usual precautionary measures for handling chemicals must be observed. Ensure good ventilation/exhaustion at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store only in original container. Provide floor trough without outlet.

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:

4,4'-ISOPROPYLIDENEDIPHENOL

Workplace exposure limits:

Respirable dust:

| State | 8 hour TWA | 15 min. STEL | 8 hour TWA | 15 min. STEL |
|-------|---------------------|---------------------|------------|--------------|
| UK | 5 mg/m ³ | 5 mg/m ³ | - | - |

DNEL/PNEC Values

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| Type | Exposure | Value | Population | Effect |
|------|---|------------------------|------------|--------|
| DNEL | Dermal TOFA-DimerFA-TETA PAA | 1.1 mg/kg | Workers | - |
| DNEL | Inhalative TOFA-DimerFA-TETA PAA | 3.9 mg/m ³ | Workers | - |
| DNEL | Dermal Benzyl alcohol | 9.5 mg/kg | Workers | - |
| DNEL | Inhalative Benzyl alcohol | 90 mg/m ³ | Workers | - |
| DNEL | Inhalative 2,4,6-tris (dimethylaminomethyl)phenol | 0.31 mg/m ³ | Workers | - |
| DNEL | Inhalative 3-aminopropyldimethylamine | 9.8 mg/m ³ | Workers | - |
| PNEC | TOFA-DimerFA-TETA PAA | 0.00434 mg/l | Freshwater | - |
| PNEC | TOFA-DimerFA-TETA PAA | 0.000434 mg/l | Seawater | - |
| PNEC | Benzyl alcohol | 1 mg/l | Freshwater | - |

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| | | | | |
|------|---|--------------|------------|---|
| PNEC | Benzyl alcohol | 0.1 mg/l | Seawater | - |
| PNEC | 2,4,6-tris (dimethylaminomethyl)phenol | 0.84 mg/l | Freshwater | - |
| PNEC | 3-aminopropyldimethylamine | 0.0535 mg/l | Freshwater | - |
| PNEC | 3-aminopropyldimethylamine | 0.00535 mg/l | Seawater | - |

8.2. Exposure controls

Engineering measures: Keep away from foodstuffs, beverages and food. Take off immediately all contaminated clothing Wash hands during breaks and at the end of the work Avoid contact with the eyes and skin.

Respiratory protection: Short term filter device. Combination filter A-P2

Hand protection: Plastic gloves Only use chemical protective gloves with CE labelling of category III. To minimise the wetness in the glove due to perspiration changing of gloves during a shift is required. Check the permeability prior to each renewed use of the glove. Preventive skin protection by use of skin-protecting agents is recommended.

Eye protection: Tightly sealed safety glasses.

Skin protection: Impermeable protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Fluid

Colour: Dark yellow

Odour: Amine-like

Solubility in water: Not miscible

Viscosity: Dynamic 1000 - 2000 mPas

Boiling point/range°C: >200

Melting point/range°C: No data available.

Flammability limits %: lower: 1.3

upper: 13.0

Flash point°C: 76

Autoflammability°C: 335

Vapour pressure: 0.3 hPa

Relative density: 1.02 g/cm³

9.2. Other information

Other information: Product is not selfigniting. Product is not explosive.

Section 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Chemical stability: No decomposition if stored and used according to specifications.

10.3. Possibility of hazardous reactions

Hazardous reactions: No dangerous reactions known.

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10.4. Conditions to avoid

Conditions to avoid: No further relevant information available.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: No dangerous decomposition products known. in the event of fire:

Poisonous gases/vapours

Corrosive gases/vapours

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

| Route | Species | Test | Value | Units |
|-----------------------|---------|---------|-------|-------|
| DERMAL 3-aminopropyl | RAT | LD50 | 1200 | mg/kg |
| DERMAL 3-aminopropyl | RBT | LD50 | 2139 | mg/kg |
| DERMAL Benzyl alcohol | RBT | LD50 | 2000 | mg/kg |
| DERMAL Tofa | RAT | LD50 | >2000 | mg/kg |
| INHALATIVE 3-aminopr | RAT | 4H LC50 | 24.8 | mg/l |
| ORAL 2,4,6-tris(dime | RAT | LD50 | 2169 | mg/kg |
| ORAL 3-aminopropyl di | RAT | LD50 | 410 | mg/kg |
| ORAL Benzyl alcohol | MUS | LD50 | 1040 | mg/kg |
| ORAL Benzyl alcohol | RAT | LD50 | 1620 | mg/kg |
| ORAL Tofa | RAT | LD50 | >2000 | mg/kg |

Hazardous ingredients:

BENZYL ALCOHOL

| | | | | |
|-----|-----|------|------|-------|
| IVN | RAT | LD50 | 53 | mg/kg |
| ORL | MUS | LD50 | 1360 | mg/kg |
| ORL | RAT | LD50 | 1230 | mg/kg |

4,4'-ISOPROPYLIDENEDIPHENOL

| | | | | |
|-----|-----|------|------|-------|
| ORL | MUS | LD50 | 2400 | mg/kg |
|-----|-----|------|------|-------|

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| | | | | |
|-----|-----|------|------|-------|
| ORL | RAT | LD50 | 3250 | mg/kg |
|-----|-----|------|------|-------|

3-AMINOPROPYLDIMETHYLAMINE

| | | | | |
|-----|-----|------|------|-------|
| ORL | RAT | LD50 | 1870 | mg/kg |
| SKN | RBT | LD50 | 600 | µl/kg |

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

| | | | | |
|-----|-----|------|------|-------|
| ORL | RAT | LD50 | 1200 | mg/kg |
| SKN | RAT | LD50 | 1280 | mg/kg |

Relevant hazards for product:

| Hazard | Route | Basis |
|--------------------------------|-------|-----------------------|
| Acute toxicity (ac. tox. 4) | ING | Hazardous: calculated |
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |
| Respiratory/skin sensitisation | DRM | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: Causes severe skin burns. May cause an allergic skin reaction.

Eye contact: Causes serious eye damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

| Species | Test | Value | Units |
|-------------------------------------|-----------|-------|-------|
| ALGAE 3-aminopropyldimethylamine | 72H EC50 | 53.5 | mg/l |
| ALGAE Benzyl alcohol | 3H EC50 | 79 | mg/l |
| ALGAE Benzyl alcohol | 96H EC50 | 640 | mg/l |
| ALGAE TOFA-DimerFA-TETA PAA | 72H IC50 | 1.25 | mg/l |
| BACTERIA 3-aminopropyldimethylamine | 0.5H EC50 | >1000 | mg/l |
| BACTERIA Benzyl Alcohol | 16H EC50 | >658 | mg/l |
| DAPHNIA Benzyl Alcohol | 24H EC50 | 400 | mg/l |

[cont...]

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| | | | |
|--|----------|------|------|
| FISH 2,4,6-tris(dimethylaminomethyl)phen | 24H LC50 | 222 | mg/l |
| FISH Benzyl Alcohol | 96H LC50 | 460 | mg/l |
| FISH TOFA-DimerFA-TETA PAA | 48H EC50 | 7.07 | mg/l |

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

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: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Dispose unused material in accordance with local and national regulations. Use EWC Code 080199, not a hazardous waste.

Disposal of packaging: Dispose of as normal industrial waste.

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: UN2735

14.2. UN proper shipping name

Shipping name: 2735 AMINES, LIQUID, CORROSIVE, N.O.S.
(N , N - d i m e t h y l - 1 , 3 - d i a m i n o p r o p a n e) ,

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

[cont...]

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14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

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: H226: Flammable liquid and vapour.
H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.
H360F: May damage fertility.
H411: Toxic to aquatic life with long lasting effects.
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.