

Version #: 4,1

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

### 1.1. Product identifier

|                                    |                       |
|------------------------------------|-----------------------|
| <b>Name of the substance</b>       | Rosin Ester           |
| <b>Trade name of the substance</b> | SYLVALITE™ RE 100L    |
| <b>Identification number</b>       | 232-479-9 (EC number) |
| <b>Registration number</b>         | 01-2119486685-21-0013 |
| <b>Synonyms</b>                    | None.                 |
| <b>SDS number</b>                  | 13537                 |
| <b>Product code</b>                | 200000001470          |

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

|                             |  |
|-----------------------------|--|
| <b>Identified uses</b>      | Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys). |
| <b>Uses advised against</b> | None known.  |

### 1.3. Details of the supplier of the safety data sheet

|                      |  |
|----------------------|--|
| <b>Company name</b>  | Kraton Chemical B.V.                                 |
| <b>Address</b>       | Transistorstraat 16, 1322 CE Almere, The Netherlands |
| <b>Phone</b>         | +31 36 546 2800                                      |
| <b>Email address</b> | regulatory.eu@kraton.com                             |

**1.4. Emergency telephone number** EU NCEC +44 1865 407 333

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

|                          |  |
|--------------------------|--|
| <b>Contains:</b>         | Resin acids and Rosin acids, esters with pentaerythritol     |
| <b>Hazard pictograms</b> | None.  |
| <b>Signal word</b>       | None.  |
| <b>Hazard statements</b> | The substance does not meet the criteria for classification. |

#### Precautionary statements

|                   |  |
|-------------------|--|
| <b>Prevention</b> | Observe good industrial hygiene practices.                                     |
| <b>Response</b>   | Wash hands after handling.   |
| <b>Storage</b>    | Store away from incompatible materials.  |
| <b>Disposal</b>   | Dispose of waste and residues in accordance with local authority requirements. |

**Supplemental label information** None.

### 2.3. Other hazards

May form explosible dust-air mixture if dispersed. This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### General information

| Chemical name  | %      | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|--|--------|------------------|------------------------|-----------|-------|
| Resin acids and Rosin acids, esters with pentaerythritol | 99-100 | 8050-26-8        | 01-2119486685-21-0013  | -         |       |
|  |        | 232-479-9        | 01-2119486685-21-0000  |           |       |
|  |        |                  | 01-2119486685-21-0001  |           |       |

Classification: -

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** Dusts may irritate the respiratory tract, skin and eyes.

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

## SECTION 5: Firefighting measures

**General fire hazards** May form combustible dust concentrations in air.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Apply extinguishing media carefully to avoid creating airborne dust.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** High concentration of airborne dust may form explosive mixture with air. Static charges generated by emptying package in or near flammable vapour may cause flash fire. During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** In case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Wear appropriate personal protective equipment.

**For emergency responders** Keep unnecessary personnel away.

**6.2. Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

### 6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use.

### 6.4. Reference to other sections

Not available.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Minimise dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Explosion-proof general and local exhaust ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at ambient temperature and atmospheric pressure.

### 7.3. Specific end use(s)

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

| Additional components | Type | Value                | Form                 |
|-----------------------|------|----------------------|----------------------|
| Dust                  | MAK  | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable fraction.  |
|                       | STEL | 20 mg/m <sup>3</sup> | Inhalable fraction.  |
|                       |      | 10 mg/m <sup>3</sup> | Respirable fraction. |

##### Belgium. Exposure Limit Values

| Additional components | Type | Value                | Form                 |
|-----------------------|------|----------------------|----------------------|
| Dust                  | TWA  | 3 mg/m <sup>3</sup>  | Respirable fraction. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable fraction.  |

##### Finland

| Additional components | Type | Value                |
|-----------------------|------|----------------------|
| Dust                  | TWA  | 5 mg/m <sup>3</sup>  |
|                       |      | 10 mg/m <sup>3</sup> |

##### France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

| Additional components     | Type                     | Value                | Form                 |
|---------------------------|--------------------------|----------------------|----------------------|
| Dust                      | VME                      | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|                           |                          | 10 mg/m <sup>3</sup> | Inhalable fraction.  |
| <b>Regulatory status:</b> | Regulatory binding (VRC) |                      |                      |

##### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

| Additional components | Type | Value               | Form            |
|-----------------------|------|---------------------|-----------------|
| Dust                  | TWA  | 4 mg/m <sup>3</sup> | Inhalable dust. |

##### Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

| Additional components | Type | Value                | Form                |
|-----------------------|------|----------------------|---------------------|
| Dust                  | AGW  | 10 mg/m <sup>3</sup> | Inhalable fraction. |

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

| Additional components | Type | Value                  | Form                 |
|-----------------------|------|------------------------|----------------------|
|                       |      | 1,25 mg/m <sup>3</sup> | Respirable fraction. |

**Iceland. OELs. Regulation 390/2009 on Pollution Limits and Measures to Reduce Pollution at the Workplace, as amended**

| Additional components | Type | Value                | Form             |
|-----------------------|------|----------------------|------------------|
| Dust                  | TWA  | 5 mg/m <sup>3</sup>  | Respirable dust. |
|                       |      | 10 mg/m <sup>3</sup> | Total dust.      |

**Ireland. Occupational Exposure Limits**

| Additional components | Type | Value                | Form                  |
|-----------------------|------|----------------------|-----------------------|
| Dust                  | TWA  | 4 mg/m <sup>3</sup>  | Respirable dust.      |
|                       |      | 10 mg/m <sup>3</sup> | Total inhalable dust. |

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

| Additional components | Type | Value               | Form  |
|-----------------------|------|---------------------|-------|
| Dust                  | TWA  | 5 mg/m <sup>3</sup> | Dust. |

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

| Additional components | Type | Value                | Form                 |
|-----------------------|------|----------------------|----------------------|
| Dust                  | TWA  | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable fraction.  |

**Netherlands**

| Additional components | Type      | Value                | Form             |
|-----------------------|-----------|----------------------|------------------|
| Dust                  | TWA (MAC) | 5 mg/m <sup>3</sup>  | Respirable dust. |
|                       |           | 10 mg/m <sup>3</sup> | Total dust.      |

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

| Additional components | Type | Value                | Form  |
|-----------------------|------|----------------------|-------|
| Dust                  | TWA  | 10 mg/m <sup>3</sup> | Dust. |

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

| Additional components | Type | Value                  | Form                 |
|-----------------------|------|------------------------|----------------------|
| Dust                  | TWA  | 10 mg/m <sup>3</sup>   | Inhalable fraction.  |
|                       |      | 1,25 mg/m <sup>3</sup> | Respirable fraction. |

**Spain. Occupational Exposure Limits**

| Additional components | Type | Value                | Form                 |
|-----------------------|------|----------------------|----------------------|
| Dust                  | TWA  | 3 mg/m <sup>3</sup>  | Respirable fraction. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable fraction.  |

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

| Additional components | Type | Value                | Form             |
|-----------------------|------|----------------------|------------------|
| Dust                  | TWA  | 3 mg/m <sup>3</sup>  | Respirable dust. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable dust.  |

**UK. EH40 Workplace Exposure Limits (WELs)**

| Additional components | Type | Value                | Form             |
|-----------------------|------|----------------------|------------------|
| Dust                  | TWA  | 4 mg/m <sup>3</sup>  | Respirable dust. |
|                       |      | 10 mg/m <sup>3</sup> | Inhalable dust.  |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures**

Follow standard monitoring procedures.

**Derived no effect levels (DNELs)****General population**

| Components   | Value            | Assessment factor | Notes                  |
|--|------------------|-------------------|------------------------|
| Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8) |                  |                   |                        |
| Long-term, Systemic, Dermal  | 2,5 mg/kg bw/day | 200               | Repeated dose toxicity |
| Long-term, Systemic, Oral  | 2,5 mg/kg bw/day | 200               | Repeated dose toxicity |

## Workers

| Components   | Value                | Assessment factor | Notes                  |
|--|----------------------|-------------------|------------------------|
| Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8) |                      |                   |                        |
| Long-term, Local, Inhalation   | 10 mg/m <sup>3</sup> |                   |                        |
| Long-term, Systemic, Dermal  | 5 mg/kg bw/day       | 100               | Repeated dose toxicity |

### Predicted no effect concentrations (PNECs)

| Components   | Value         | Assessment factor | Notes |
|--|---------------|-------------------|-------|
| Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8) |               |                   |       |
| Freshwater   | 0,1 mg/l      | 1000              |       |
| Marine water   | 0,01 mg/l     | 10000             |       |
| Sediment (freshwater)  | 2317,75 mg/kg |                   |       |
| Sediment (marine water)  | 231,78 mg/kg  |                   |       |
| Soil   | 462,06 mg/kg  |                   |       |
| STP  | 2,525 mg/l    | 10                |       |

## 8.2. Exposure controls

### Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear safety glasses with side shields (or goggles).

#### Skin protection

##### - Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

##### - Other

Wear suitable protective clothing.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eye wash fountain and emergency showers are recommended.

### Environmental exposure controls

Environmental manager must be informed of all major releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |   |
|--|---|
| Physical state   | Solid.  |
| Form   | Pastilles or Pellets. or Flakes.                |
| Colour   | Light yellow                                    |
| Odour  | Mild.   |
| Melting point/freezing point                             | Not available.                                  |
| Boiling point or initial boiling point and boiling range | Not available.                                  |
| Flammability   | Not available.                                  |
| Flash point  | 260,0 °C (500,0 °F) Setaflash Closed Cup        |
| Auto-ignition temperature                                | 399 °C (750,2 °F)                               |
| Decomposition temperature                                | Not available.                                  |
| pH   | Not available.                                  |
| Kinematic viscosity                                      | Not available.                                  |
| Solubility   |   |
| Solubility (water)                                       | 0,38 mg/l at 20°C; Data is for similar product. |
| Partition coefficient (n-octanol/water) (log value)      | 3,6 at 20°C                                     |

|                                 |                                       |
|---------------------------------|---------------------------------------|
| Vapour pressure                 | <0,001 mm Hg at 20°C                  |
| Density and/or relative density |                                       |
| Density                         | 1070,00 kg/m <sup>3</sup> at 25°C     |
| Relative density                | 1,07 OECD 105 at 25°C/25°C; (water=1) |
| Vapour density                  | Not available.                        |
| Particle characteristics        | Not available.                        |

## 9.2. Other information

**9.2.1. Information with regard to physical hazard classes** No relevant additional information available.

### 9.2.2. Other safety characteristics

|                   |  |
|-------------------|--|
| Chemical family   | Rosin Ester  |
| Evaporation rate  | 0 (n-BuAc=1) estimated                             |
| Percent volatile  | <0,5 % EPA Method 24                               |
| Pounds per gallon | 9 lb/gal at 25°C                                   |
| Softening point   | > 96 - < 102 °C (> 204,8 - < 215,6 °F) Ring & Ball |
| Viscosity         | 11800 cP Brookfield at 125°C                       |
| Weighted solids   | 100 %  |

## SECTION 10: Stability and reactivity

|   |  |
|---|--|
| <b>10.1. Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.  |
| <b>10.2. Chemical stability</b>                 | Material is stable under normal conditions.  |
| <b>10.3. Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.  |
| <b>10.4. Conditions to avoid</b>                | Strong oxidising agents. Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimise dust generation and accumulation. |
| <b>10.5. Incompatible materials</b>             | Strong oxidising agents.   |
| <b>10.6. Hazardous decomposition products</b>   | Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.                |

## SECTION 11: Toxicological information

**General information** Not available.

### Information on likely routes of exposure

|  |  |
|--|--|
| <b>Inhalation</b>  | Dust may irritate respiratory system.  |
| <b>Skin contact</b>                                      | No adverse effects due to skin contact are expected.   |
| <b>Eye contact</b>                                       | Direct contact with eyes may cause temporary irritation.   |
| Resin acids and Rosin acids, esters with pentaerythritol | Irritation Corrosion - Eye, No eye irritation.<br>Result: Negative<br>Species: New Zealand white rabbit<br>Organ: Eye<br>Test Duration: 72 hr<br>Observation Period: 7 days<br>Notes: OECD 405 |

**Ingestion** May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms** Dusts may irritate the respiratory tract, skin and eyes.

### 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.

| Components   | Species                  | Test Results   |
|--|--------------------------|--|
| Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8) |                          |  |
| <b>Acute</b>   |                          |  |
| <b>Dermal</b>  |                          |  |
| LD50   | New Zealand white rabbit | > 2000 mg/kg, 14 days At this dose no death occurred.; OECD 402. |
|  | Rabbit                   | > 2000 mg/kg, 24 Hours   |
| <b>Oral</b>  |                          |  |
| LD50   | Rat                      | > 2000 mg/kg   |

| Components   | Species  | Test Results   |
|--|--|--|
|  | Sprague-Dawley rat   | > 2000 mg/kg, 14 days At this dose no death occurred.; OECD 425  |
| * Estimates for product may be based on additional component data not shown.   |  |  |
| <b>Skin corrosion/irritation</b>   | Prolonged skin contact may cause temporary irritation.   |  |
| <b>Corrosivity</b>   |  |  |
| Resin acids and Rosin acids, esters with pentaerythritol   |  | Irritation Corrosion - Skin, No skin irritation.<br>Result: Negative<br>Species: New Zealand white rabbit<br>Organ: Skin<br>Test Duration: 4 hr<br>Observation Period: 72 hr<br>Notes: OECD 404  |
| <b>Serious eye damage/eye irritation</b>   | Direct contact with eyes may cause temporary irritation.   |  |
| <b>Eye contact</b>   |  |  |
| Resin acids and Rosin acids, esters with pentaerythritol   |  | Irritation Corrosion - Eye, No eye irritation.<br>Result: Negative<br>Species: New Zealand white rabbit<br>Organ: Eye<br>Test Duration: 72 hr<br>Observation Period: 7 days<br>Notes: OECD 405   |
| <b>Respiratory sensitisation</b>   | Not available.   |  |
| <b>Skin sensitisation</b>  | This product is not expected to cause skin sensitisation.  |  |
| <b>Skin Sensitisation</b>  |  |  |
| Resin acids and Rosin acids, esters with pentaerythritol   |  | Local Lymph Node Assay - Lowest Concentration Producing Reaction, Not a skin sensitiser.<br>Result: Negative<br>Species: Mouse<br>Organ: Skin<br>Notes: OECD 429<br>Maximisation assay (Magnusson and Kligman), Not a skin sensitiser.<br>Result: Negative<br>Species: Guinea pig<br>Organ: Skin<br>Notes: OECD 406  |
| <b>Germ cell mutagenicity</b>  | No data available to indicate product or any components present at greater than 0.1% are carcinogenic. |  |
| <b>Mutagenicity</b>  |  |  |
| Resin acids and Rosin acids, esters with pentaerythritol   |  | Germ Cell Mutagenicity: Ames, No data available to indicate product or any components present at greater than 0,1% are mutagenic or genotoxic.<br>Result: Negative<br>Species: Salmonella typhimurium<br>Notes: OECD 471<br>Germ Cell Mutagenicity: Chromosome Abberation, This material is considered to be non-clastogenic to human lymphocytes in vitro.<br>Result: Negative<br>Species: Human<br>Notes: OECD 473<br>In vitro gene mutation study in mammalian cells<br>Result: Negative<br>Species: Mouse<br>Notes: OECD 476 |
| <b>Carcinogenicity</b>   | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.                        |  |
| <b>Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)</b> | Not listed.  |  |
| <b>Reproductive toxicity</b>   | This product is not expected to cause reproductive or developmental effects.                           |  |
| <b>Specific target organ toxicity - single exposure</b>  | Not available.   |  |
| <b>Specific target organ toxicity - repeated exposure</b>  | Not available.   |  |
| <b>Aspiration hazard</b>   | Not available.   |  |

**Mixture versus substance information** No information available.

## 11.2. Information on other hazards

**Endocrine disrupting properties** The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### Other information

Resin acids and Rosin acids, esters with pentaerythritol

Cytotoxicity - in Vitro, Not cytotoxic  
Result: Negative  
Species: Human  
Organ: Fibroblasts cells  
Notes: BS 30993-5

Cytotoxicity - in Vitro, Not cytotoxic  
Result: Negative  
Species: Human  
Organ: Lung cell tissue  
Notes: BS 5736

Cytotoxicity - in Vitro, Not cytotoxic  
Result: Negative  
Species: Mouse  
Organ: Fibroblasts cells  
Test Duration: 72 hr  
Observation Period: 24 hr  
Notes: BS 5736

## SECTION 12: Ecological information

**12.1. Toxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components   | Species | Test Results  |
|--|---------|---|
| Resin acids and Rosin acids, esters with pentaerythritol (CAS 8050-26-8) |         |   |
| <b>Aquatic</b>   |         |   |
| Algae  | EL50    | Green algae (Selenastrum capricornutum) > 1000 mg/l, 72 hr OECD 201 |
|  | NOEL    | Green algae (Selenastrum capricornutum) 1000 mg/l, 72 hr OECD 201   |
| Crustacea  | EL50    | Water flea (Daphnia magna) > 1000 mg/l, 48 hr OECD 202              |
|  | NOEC    | Water flea (Daphnia magna) 1000 mg/l, 48 hr OECD 202                |
| Fish   | LL50    | Fathead minnow (Pimephales promelas) > 1000 mg/l, 96 hr OECD 203    |
|  | NOEL    | Fathead minnow (Pimephales promelas) 1000 mg/l, 96 hr OECD 203      |

\* Estimates for product may be based on additional component data not shown.

**12.2. Persistence and degradability** Not readily degradable.

### Biodegradability

#### Percent Degradation (Aerobic Biodegradation)

Resin acids and Rosin acids, esters with pentaerythritol 0 % OECD 301B  
Result: Not readily biodegradable.  
Species: Activated sewage sludge  
Test Duration: 28 days

**12.3. Bioaccumulative potential** Not available.

**Partition coefficient n-octanol/water (log Kow)**  
SYLVALITE™ RE 100L

3,6, at 20°C

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

**12.6. Endocrine disrupting properties** The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12.7. Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods



|                                     |  |
|-------------------------------------|--|
| <b>Residual waste</b>               | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>       | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |
| <b>EU waste code</b>                | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Disposal methods/information</b> | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.                         |
| <b>Special precautions</b>          | Dispose in accordance with all applicable regulations.   |

## SECTION 14: Transport information

### ADR

|   |                                   |
|---|-----------------------------------|
| <b>14.1. UN number</b>                    | Not regulated as dangerous goods. |
| <b>14.2. UN proper shipping name</b>      | Not regulated as dangerous goods. |
| <b>14.3. Transport hazard class(es)</b>   |                                   |
| <b>Class</b>                              | Not assigned.                     |
| <b>Subsidiary risk</b>                    | -                                 |
| <b>Hazard No. (ADR)</b>                   | Not assigned.                     |
| <b>Tunnel restriction code</b>            | Not assigned.                     |
| <b>14.4. Packing group</b>                | Not assigned.                     |
| <b>14.5. Environmental hazards</b>        | No.                               |
| <b>14.6. Special precautions for user</b> | Not assigned.                     |

### RID

|   |                                   |
|---|-----------------------------------|
| <b>14.1. UN number</b>                    | Not regulated as dangerous goods. |
| <b>14.2. UN proper shipping name</b>      | Not regulated as dangerous goods. |
| <b>14.3. Transport hazard class(es)</b>   |                                   |
| <b>Class</b>                              | Not assigned.                     |
| <b>Subsidiary risk</b>                    | -                                 |
| <b>14.4. Packing group</b>                | Not assigned.                     |
| <b>14.5. Environmental hazards</b>        | No.                               |
| <b>14.6. Special precautions for user</b> | Not assigned.                     |

### ADN

|   |                                   |
|---|-----------------------------------|
| <b>14.1. UN number</b>                    | Not regulated as dangerous goods. |
| <b>14.2. UN proper shipping name</b>      | Not regulated as dangerous goods. |
| <b>14.3. Transport hazard class(es)</b>   |                                   |
| <b>Class</b>                              | Not assigned.                     |
| <b>Subsidiary risk</b>                    | -                                 |
| <b>14.4. Packing group</b>                | Not assigned.                     |
| <b>14.5. Environmental hazards</b>        | No.                               |
| <b>14.6. Special precautions for user</b> | Not assigned.                     |

### IATA

|   |                                   |
|---|-----------------------------------|
| <b>14.1. UN number</b>                    | Not regulated as dangerous goods. |
| <b>14.2. UN proper shipping name</b>      | Not regulated as dangerous goods. |
| <b>14.3. Transport hazard class(es)</b>   |                                   |
| <b>Class</b>                              | Not assigned.                     |
| <b>Subsidiary risk</b>                    | -                                 |
| <b>14.4. Packing group</b>                | Not assigned.                     |
| <b>14.5. Environmental hazards</b>        | No.                               |
| <b>14.6. Special precautions for user</b> | Not assigned.                     |

### IMDG

|   |                                   |
|---|-----------------------------------|
| <b>14.1. UN number</b>                  | Not regulated as dangerous goods. |
| <b>14.2. UN proper shipping name</b>    | Not regulated as dangerous goods. |
| <b>14.3. Transport hazard class(es)</b> |                                   |
| <b>Class</b>                            | Not assigned.                     |
| <b>Subsidiary risk</b>                  | -                                 |
| <b>14.4. Packing group</b>              | Not assigned.                     |

#### 14.5. Environmental hazards

Marine pollutant No.

EmS Not assigned.

14.6. Special precautions for user Not assigned.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

### SECTION 15: Regulatory information

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

##### EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended  
Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended  
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended  
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended  
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended  
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended  
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended  
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA  
Not listed.

##### Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended  
Not listed.

##### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended  
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

##### Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended  
Not listed.

##### Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.

##### National regulations

Follow national regulation for work with chemical agents.

#### 15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

##### Water hazard class

AwSV WGK1

### SECTION 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture Not applicable.

Full text of any statements, which are not written out in full under sections 2 to 15 None.

Revision information Product and Company Identification: Product and Company Identification  
SECTION 16: Other information: Disclaimer

## Training information

## Disclaimer

Follow training instructions when handling this material.

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