# RP DNA Prep and Membrane Processing (MP) Kit

**KIT2030**

Date of compilation: 2021-11-29

## Bill of materials

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP Conjugate RP System Insert</td>
<td>Internal code ASY2040</td>
<td></td>
<td></td>
<td>2 – 16</td>
</tr>
<tr>
<td>MP Substrate RP System Insert</td>
<td>Internal code ASY2042</td>
<td>Eye Irrit. 2 / H319</td>
<td>![Exclamation Mark]</td>
<td>17 – 28</td>
</tr>
<tr>
<td>DNA Prep Pack Riboprinter System</td>
<td>Internal code ASY2028</td>
<td></td>
<td></td>
<td>29 – 40</td>
</tr>
<tr>
<td>MP PROBE, FILLED INSERT (RIBOPRINTER SYSTEM)</td>
<td>Internal code ASY2041</td>
<td></td>
<td></td>
<td>41 – 51</td>
</tr>
</tbody>
</table>
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name: MP Conjugate RP System Insert
   Registration number (REACH): not relevant (mixture)
   Product code(s): ASY2040

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses: Laboratory and analytical use

1.3 Details of the supplier of the safety data sheet
   Hygiena International
   8 Woodshots Meadow
   Herts Croxley Park
   United Kingdom
   Telephone: +44 (0) 1923 818821
   Telefax: +44 (0)1923 818825
   e-mail: customerserviceuk@hygiena.com
   Website: www.Hygiena.com

1.4 Emergency telephone number
   Emergency information service: +44 (0) 1923 818821
   This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification according to Regulation (EC) No 1272/2008 (CLP)
   This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP)
   not required

2.3 Other hazards
   of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances
   Not relevant (mixture)

3.2 Mixtures
## Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrogen Free Water</td>
<td>CAS No 7732-18-5</td>
<td>10 - &lt; 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium phosphate dibasic</td>
<td>CAS No 7758-79-4</td>
<td>5 - &lt; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Block</td>
<td></td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>CAS No 7647-14-5</td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tween 20</td>
<td>CAS No 9005-64-5, EC No 500-018-3, REACH Reg. No 01-2119971749-17-xxxx</td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium phosphate monobasic</td>
<td>CAS No 7758-80-7</td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trehalose Dihydrate</td>
<td>CAS No 6138-23-4, EC No 202-739-6</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tris</td>
<td>CAS No 77-86-1</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bovine Serum Albumin</td>
<td>CAS No 9048-46-8</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>CAS No 7786-30-3, EC No 232-094-6, REACH Reg. No 01-2119485597-19-xxxx</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>CAS No 7791-18-6, EC No 232-094-6</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkaline Phosphatase</td>
<td>CAS No 9001-78-9</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>CAS No 7646-85-7, EC No 231-592-0, Index No 030-003-00-2</td>
<td>&lt; 0.1</td>
<td>Acute Tox. 4 / H302, Skin Corr. 1B / H314, STOT SE 3 / H335, Aquatic Acute 1 / H400, Aquatic Chronic 1 / H410</td>
<td>Acute Tox. 4 / H302, Skin Corr. 1B / H314, STOT SE 3 / H335, Aquatic Acute 1 / H400, Aquatic Chronic 1 / H410</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact
Wash with plenty of soap and water.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media
Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Carbon monoxide (CO), Carbon dioxide (CO2)
5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Remove persons to safety.

For emergency responders
Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill
Covering of drains
Advice on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
Appropriate containment techniques
Use of adsorbent materials.
Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections


SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations
- Measures to prevent fire as well as aerosol and dust generation
  Use local and general ventilation. Use only in well-ventilated areas.
Advice on general occupational hygiene
Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of effects
Protect against external exposure, such as frost
7.3 **Specific end use(s)**

See section 16 for a general overview.

---

**SECTION 8: Exposure controls/personal protection**

8.1 **Control parameters**

### Occupational exposure limit values (Workplace Exposure Limits)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Ceiling-C [ppm]</th>
<th>Ceiling-C [mg/m³]</th>
<th>Notation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>zinc chloride</td>
<td>7646-85-7</td>
<td>WEL</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>fume</td>
<td>EH40/2005</td>
</tr>
</tbody>
</table>

**Notation**
- Ceiling-C: ceiling value is a limit value above which exposure should not occur
- STEL: short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
- TWA: time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

---

### Relevant DNELs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>DNEL</td>
<td>1 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

### Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tween 20</td>
<td>9005-64-5</td>
<td>PNEC</td>
<td>0.2 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Tween 20</td>
<td>9005-64-5</td>
<td>PNEC</td>
<td>0.02 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Tween 20</td>
<td>9005-64-5</td>
<td>PNEC</td>
<td>1.141 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Tween 20</td>
<td>9005-64-5</td>
<td>PNEC</td>
<td>1,000 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>3.21 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>0.32 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>90 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
## Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>288.9 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>28.89 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td>7786-30-3</td>
<td>PNEC</td>
<td>662.8 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>3.21 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>0.32 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>90 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>288.9 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>28.89 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>662.8 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>20.6 µg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>6.1 µg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>100 µg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>117.8 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>56.5 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>PNEC</td>
<td>35.6 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

### 8.2 Exposure controls

#### Appropriate engineering controls
- General ventilation.

#### Individual protection measures (personal protective equipment)
- Eye/face protection
  - Wear eye/face protection.
Skin protection
- Hand protection
  Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
- Other protection measures
  Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls
Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>not determined</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Boiling point or initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>Flammability</td>
<td>this material is combustible, but will not ignite readily</td>
</tr>
<tr>
<td>Lower and upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not relevant</td>
</tr>
<tr>
<td>pH (value)</td>
<td>not determined</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>not determined</td>
</tr>
</tbody>
</table>
### Partition coefficient

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol/water (log value)</th>
<th>this information is not available</th>
</tr>
</thead>
</table>

| Vapour pressure | not determined |

### Density and/or relative density

<table>
<thead>
<tr>
<th>Density</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative vapour density</td>
<td>information on this property is not available</td>
</tr>
</tbody>
</table>

| Particle characteristics | not relevant (liquid) |

### 9.2 Other information

| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards): not relevant |

### Other safety characteristics

| Solvent content | 36.47 % |
| Solid content   | 3.532 % |

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

- Oxidisers

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.
SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)
This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity
Shall not be classified as acutely toxic.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Chloride</td>
<td>7646-85-7</td>
<td>oral</td>
<td>1,100 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards
There is no additional information.
SECTION 12: Ecological information

12.1 Toxicity
Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Endocrine disrupting properties
None of the ingredients are listed.

12.7 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings
Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
none

14.4 Packing group
not assigned

14.5 Environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user
There is no additional information.
14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Name acc. to inventory</th>
<th>CAS No</th>
<th>Restriction</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Chloride</td>
<td>substances in tattoo inks and permanent make-up</td>
<td></td>
<td>R75</td>
<td>75</td>
</tr>
</tbody>
</table>

Legend

R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
(i) 0,1 % by weight, if the substance is used solely as a pH regulator;
(ii) 0,01 % by weight, in all other cases;
(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
(i) "Rinse-off products";
(ii) "Not to be used in products applied on mucous membranes";
(iii) "Not to be used in eye products";
(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009 (*2), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
Legend

3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
   (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
   (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
   (a) the statement "Mixture for use in tattoos or permanent make-up";
   (b) a reference number to uniquely identify the batch;
   (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label by Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
   (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
   (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
   (f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
   (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008. The information shall be clearly visible, easily legible and marked in a way that is indelible. The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise. Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use. Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.
8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.
9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101.3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Deco-Paint Directive

| VOC content | 36.47 % |

Industrial Emissions Directive (IED)

| VOC content | 36.47 % |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed
Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Listed in</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride (Anhydrous)</td>
<td></td>
<td>A)</td>
<td></td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td></td>
<td>A)</td>
<td></td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td></td>
<td>A)</td>
<td></td>
</tr>
</tbody>
</table>

Legend
A) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Hazardous to the aquatic environment - acute hazard</td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>Hazardous to the aquatic environment - chronic hazard</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>Ceiling-C</td>
<td>Ceiling value</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</td>
</tr>
</tbody>
</table>
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

MP Conjugate RP System Insert

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>Skin Corr.</td>
<td>Corrosive to skin</td>
</tr>
<tr>
<td>Skin Irrit.</td>
<td>Irritant to skin</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>STOT SE</td>
<td>Specific target organ toxicity - single exposure</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substance of Very High Concern</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>WEL</td>
<td>Workplace exposure limit</td>
</tr>
</tbody>
</table>

Key literature references and sources for data


Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).
List of relevant phrases (code and full text as stated in section 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name: MP Substrate RP System Insert
   Registration number (REACH): not relevant (mixture)
   Product code(s): ASY2042

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses: Laboratory and analytical use

1.3 Details of the supplier of the safety data sheet
   Hygiena International
   8 Woodshots Meadow
   Herts Croxley Park
   United Kingdom

   Telephone: +44 (0) 1923 818821
   Telefax: +44 (0) 1923 818825
   e-mail: customerserviceuk@hygiena.com
   Website: www.Hygiena.com

1.4 Emergency telephone number
   Emergency information service: +44 (0) 1923 818821
   This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazards identification

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard class and category</th>
<th>Hazard statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td>serious eye damage/eye irritation</td>
<td>2</td>
<td>Eye Irrit. 2</td>
<td>H319</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP)
   - Signal word: warning
   - Pictograms: GHS07
   - Hazard statements
     H319 Causes serious eye irritation.
- Precautionary statements
  
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.
  
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards
of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances
Not relevant (mixture)

3.2 Mixtures
Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bicarbonate</td>
<td>CAS No 144-55-8</td>
<td>50 - &lt; 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC No 205-633-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH Reg. No 01-2119457606-32-xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Carbonate, Anhydrous</td>
<td>CAS No 497-19-8</td>
<td>10 - &lt; 25</td>
<td>Eye Irrit. 2 / H319</td>
<td>!</td>
</tr>
<tr>
<td></td>
<td>EC No 207-838-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index No 011-005-00-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH Reg. No 01-2119485498-19-xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnesium Acetate Tetrahydrate</td>
<td>CAS No 16674-78-5</td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPD</td>
<td>CAS No 122341-56-4</td>
<td>1 - &lt; 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.
Following skin contact
Rinse skin with water/shower.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water, Foam, ABC-powder

Unsuitable extinguishing media
Water jet

5.2 Special hazards arising from the substance or mixture
Deposited combustible dust has considerable explosion potential.

Hazardous combustion products
Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Remove persons to safety.

For emergency responders
Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions
Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up
Advice on how to contain a spill
Covering of drains, Take up mechanically
Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections


SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
  
  Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details
  
  Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres
  
  Removal of dust deposits.

- Ventilation requirements
  
  Use local and general ventilation.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Ceiling-C [ppm]</th>
<th>Ceiling-C [mg/m³]</th>
<th>Notation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>dust</td>
<td>WEL</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EH40/2005</td>
</tr>
<tr>
<td>GB</td>
<td>dust</td>
<td>WEL</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r</td>
<td>EH40/2005</td>
</tr>
</tbody>
</table>
Notation

Ceiling-C
- ceiling value is a limit value above which exposure should not occur

i
- inhalable fraction

r
- respirable fraction

STEL
- short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA
- time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear protective gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>not determined</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Boiling point or initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>Flammability</td>
<td>this material is combustible, but will not ignite readily</td>
</tr>
<tr>
<td>Lower and upper explosion limit</td>
<td>0 vol% - 0 vol%</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
Auto-ignition temperature | not determined
Decomposition temperature | not relevant
pH (value) | not applicable
Kinematic viscosity | not relevant
Solubility(ies) | not determined

Partition coefficient
Partition coefficient n-octanol/water (log value) | this information is not available

Vapour pressure | 66.9 Pa at 20 °C

Density and/or relative density
Density | not determined
Relative vapour density | information on this property is not available

Particle characteristics | no data available

9.2 Other information
Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics
Solvent content | 7.4 %
Solid content | 92.6 %

SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability
See below "Conditions to avoid".

10.3 Possibility of hazardous reactions
No known hazardous reactions.
10.4 **Conditions to avoid**

There are no specific conditions known which have to be avoided.

**Hints to prevent fire or explosion**

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 **Incompatible materials**

Oxidisers

10.6 **Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

11.1 **Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Test data are not available for the complete mixture.

**Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification according to GHS (1272/2008/EC, CLP)**

**Acute toxicity**

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if swallowed.

**Skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

**Carcinogenicity**

Shall not be classified as carcinogenic.

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

**Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

**Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.
11.2 Information on other hazards
There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity
Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability
Data are not available.

12.3 Bioaccumulative potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 Results of PBT and vPvB assessment
Data are not available.

12.6 Endocrine disrupting properties
None of the ingredients are listed.

12.7 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings
Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
none

14.4 Packing group
not assigned

14.5 Environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations
14.6 **Special precautions for user**

There is no additional information.

14.7 **Maritime transport in bulk according to IMO instruments**

The cargo is not intended to be carried in bulk.

**Information for each of the UN Model Regulations**

- **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information**
  - Not subject to ADR, RID and ADN.

- **International Maritime Dangerous Goods Code (IMDG) - Additional information**
  - Not subject to IMDG.

- **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**
  - Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

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

**Relevant provisions of the European Union (EU)**

**Restrictions according to REACH, Annex XVII**

- none of the ingredients are listed

**List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list**

- none of the ingredients are listed

**Deco-Paint Directive**

| VOC content | 7.4 % |

**Industrial Emissions Directive (IED)**

| VOC content | 7.4 % |

**Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)**

- none of the ingredients are listed

**Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

- none of the ingredients are listed

**Water Framework Directive (WFD)**
List of pollutants (WFD)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Listed in</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate, Anhydrous</td>
<td>A)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend
A) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)
None of the ingredients are listed.

National inventories

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>AICS</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>CA</td>
<td>DSL</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>CN</td>
<td>IECSC</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>EU</td>
<td>ECSI</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>EU</td>
<td>REACH Reg.</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>JP</td>
<td>CSCL-ENCS</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>JP</td>
<td>ISHA-ENCS</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>KR</td>
<td>KECI</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>MX</td>
<td>INSQ</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>NZ</td>
<td>NZIoC</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>PH</td>
<td>PICCS</td>
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</tr>
<tr>
<td>TR</td>
<td>CICR</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>TW</td>
<td>TCSI</td>
<td>not all ingredients are listed</td>
</tr>
<tr>
<td>US</td>
<td>TSCA</td>
<td>not all ingredients are listed</td>
</tr>
</tbody>
</table>

Legend
AICS: Australian Inventory of Chemical Substances
CICR: Chemical Inventory and Control Regulation
CSCL-ENCS: List of Existing and New Chemical Substances (CSCL-ENCS)
DSL: Domestic Substances List (DSL)
ECSI: EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC: Inventory of Existing Chemical Substances Produced or Imported in China
INSQ: National Inventory of Chemical Substances
ISHA-ENCS: Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI: Korea Existing Chemicals Inventory
NZIoC: New Zealand Inventory of Chemicals
PICCS: Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.: REACH registered substances
TCSI: Taiwan Chemical Substance Inventory
TSCA: Toxic Substance Control Act

15.2 Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.
### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>Ceiling-C</td>
<td>Ceiling value</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>Eye Dam.</td>
<td>Seriously damaging to the eye</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>Irritant to the eye</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substance of Very High Concern</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
</tbody>
</table>
Abbr. | Descriptions of used abbreviations
---|---
vPvB | Very Persistent and very Bioaccumulative
WEL | Workplace exposure limit

**Key literature references and sources for data**


**Classification procedure**

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**List of relevant phrases (code and full text as stated in section 2 and 3)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

**Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name                        DNA Prep Pack Riboprinter System
   Registration number (REACH)       not relevant (mixture)
   Product code(s)                  ASY2028

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses          Laboratory and analytical use

1.3 Details of the supplier of the safety data sheet
   Hygiena International
   8 Woodshots Meadow
   Herts Croxley Park
   United Kingdom

   Telephone: +44 (0) 1923 818821
   Telefax: +44 (0)1923 818825
   e-mail: customerserviceuk@hygiena.com
   Website: www.Hygiena.com

1.4 Emergency telephone number
   Emergency information service     +44 (0) 1923 818821
   This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification according to Regulation (EC) No 1272/2008 (CLP)
   This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP)
   not required

2.3 Other hazards
   of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances
   Not relevant (mixture)

3.2 Mixtures
### Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyvinylpyrrolidone</td>
<td>CAS No 9003-39-8</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbowax</td>
<td>CAS No 25322-68-3 EC No 500-038-2</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC No 500-038-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REACH Reg. No 01-2119958801-32-xxxx</td>
<td></td>
</tr>
<tr>
<td>Achromopeptidase</td>
<td>CAS No 78642-25-8</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loading Dye Solution</td>
<td></td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dithioerythritol</td>
<td>CAS No 6892-68-8</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrogen Free Water</td>
<td>CAS No 7732-18-5</td>
<td>0.1 – &lt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ribonuclease A</td>
<td>CAS No 9001-99-4</td>
<td>0.1 – &lt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ficoll 400 DL</td>
<td>CAS No 26873-85-8</td>
<td>0.1 – &lt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tris</td>
<td>CAS No 77-86-1</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>CAS No 7647-14-5</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDTA disodium dihydrate</td>
<td>CAS No 6381-92-6 EC No 205-358-3</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC No 205-358-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>REACH Reg. No 01-2119486775-20-xxxx</td>
<td></td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>CAS No 7791-18-6 EC No 232-094-6</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bromophenol Blue</td>
<td>CAS No 34725-61-6</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xylene Cyanol</td>
<td>CAS No 2650-17-1</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dNTP Mix</td>
<td></td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lambda Phage DNA</td>
<td>CAS No 91080-14-7</td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.
SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact
Wash with plenty of soap and water.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media
Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel
   Remove persons to safety.
   For emergency responders
   Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions
   Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up
   Advice on how to contain a spill
   Covering of drains
   Advice on how to clean up a spill
   Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
   Appropriate containment techniques
   Use of adsorbent materials.
   Other information relating to spills and releases
   Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Recommendations
   - Measures to prevent fire as well as aerosol and dust generation
     Use local and general ventilation. Use only in well-ventilated areas.
   Advice on general occupational hygiene
   Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

7.3 Specific end use(s)
   See section 16 for a general overview.
### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

This information is not available.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>DNEL</td>
<td>40.2 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
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<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>DNEL</td>
<td>112 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>DNEL</td>
<td>1.5 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>DNEL</td>
<td>3 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - systemic effects</td>
</tr>
<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>DNEL</td>
<td>1.5 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - local effects</td>
</tr>
<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>DNEL</td>
<td>3 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>acute - local effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>PNEC</td>
<td>0.273 g/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>PNEC</td>
<td>27.3 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>PNEC</td>
<td>1,030 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>PNEC</td>
<td>103 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Carbowax</td>
<td>25322-68-3</td>
<td>PNEC</td>
<td>46.4 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
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<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>PNEC</td>
<td>2.5 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>PNEC</td>
<td>0.25 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
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<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>PNEC</td>
<td>50 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
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<tr>
<td>EDTA disodium dihydrat</td>
<td>6381-92-6</td>
<td>PNEC</td>
<td>1.1 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
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<tr>
<td>Magnesium Chloride Hexahydrat</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>3.21 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>0.32 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>90 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>288.9 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>28.89 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Magnesium Chloride Hexahydrate</td>
<td>7791-18-6</td>
<td>PNEC</td>
<td>662.8 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Appropriate engineering controls
General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection
Wear eye/face protection.

Skin protection

- Hand protection
Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures
Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls
Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>not determined</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Boiling point or initial boiling point and boiling range</td>
<td>205.7 °C at 977.6 hPa</td>
</tr>
<tr>
<td>Flammability</td>
<td>this material is combustible, but will not ignite readily</td>
</tr>
<tr>
<td>Lower and upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>360 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>not relevant</td>
</tr>
<tr>
<td>pH (value)</td>
<td>not determined</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>not determined</td>
</tr>
</tbody>
</table>

### Partition coefficient

| Partition coefficient n-octanol/water (log value) | this information is not available |

| Vapour pressure | <0.1 Pa at 20 °C |

### Density and/or relative density

<table>
<thead>
<tr>
<th>Density</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative vapour density</td>
<td>information on this property is not available</td>
</tr>
</tbody>
</table>

| Particle characteristics | not relevant (liquid) |

### 9.2 Other information
Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent content</td>
<td>9.921 %</td>
</tr>
<tr>
<td>Solid content</td>
<td>4.661 %</td>
</tr>
<tr>
<td>Temperature class (EU, acc. to ATEX)</td>
<td>T2 (maximum permissible surface temperature on the equipment: 300°C)</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

10.1 **Reactivity**
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 **Chemical stability**
The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 **Possibility of hazardous reactions**
No known hazardous reactions.

10.4 **Conditions to avoid**
There are no specific conditions known which have to be avoided.

10.5 **Incompatible materials**
Oxidisers

10.6 **Hazardous decomposition products**
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

11.1 **Information on hazard classes as defined in Regulation (EC) No 1272/2008**
Test data are not available for the complete mixture.

Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification according to GHS (1272/2008/EC, CLP)**
This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

**Acute toxicity**
 Shall not be classified as acutely toxic.

**Skin corrosion/irritation**
Shall not be classified as corrosive/irritant to skin.
Serious eye damage/eye irritation
   Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
   Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity
   Shall not be classified as germ cell mutagenic.

Carcinogenicity
   Shall not be classified as carcinogenic.

Reproductive toxicity
   Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
   Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
   Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
   Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards
   There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity
   Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability
   Data are not available.

12.3 Bioaccumulative potential
   Data are not available.

12.4 Mobility in soil
   Data are not available.

12.5 Results of PBT and vPvB assessment
   Data are not available.

12.6 Endocrine disrupting properties
   None of the ingredients are listed.

12.7 Other adverse effects
   Data are not available.
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings
Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 Transport hazard class(es)
none

14.4 Packing group
not assigned

14.5 Environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user
There is no additional information.

14.7 Maritime transport in bulk according to IMO instruments
The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information
Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - Additional information
Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information
Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII
none of the ingredients are listed
List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list
none of the ingredients are listed

Deco-Paint Directive

| VOC content | 7.821 % |

Industrial Emissions Directive (IED)

| VOC content | 4.719 % |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)
none of the ingredients are listed

Water Framework Directive (WFD)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Listed in</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTA disodium dihydrate</td>
<td></td>
<td>A)</td>
<td></td>
</tr>
</tbody>
</table>

Legend

A) Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)
None of the ingredients are listed.

15.2 Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
</tbody>
</table>
### Descriptions of used abbreviations

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substance of Very High Concern</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

### Key literature references and sources for data


### Classification procedure

- Physical and chemical properties: The classification is based on tested mixture.
- Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name MP PROBE, FILLED INSERT (RIBOPRINTER SYSTEM)
   Registration number (REACH) not relevant (mixture)
   Product code(s) ASY2041

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses Laboratory and analytical use

1.3 Details of the supplier of the safety data sheet
   Hygiena International
   8 Woodshots Meadow
   Herts Croxley Park
   United Kingdom
   Telephone: +44 (0) 1923 818821
   Telefax: +44 (0)1923 818825
   e-mail: customerserviceuk@hygiena.com
   Website: www.Hygiena.com

1.4 Emergency telephone number
   Emergency information service +44 (0) 1923 818821
   This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification according to Regulation (EC) No 1272/2008 (CLP)
   This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP)
   not required

2.3 Other hazards
   of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances
   Not relevant (mixture)

3.2 Mixtures
**Safety Data Sheet**

according to Regulation (EC) No. 1907/2006 (REACH)

**MP PROBE, FILLED INSERT (RIBOPRINTER SYSTEM)**

Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>CAS No 2044-56-6 EC No 218-058-2</td>
<td>25 – &lt; 50</td>
<td>Acute Tox. 4 / H302</td>
<td>![Pictogram]</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>CAS No 7647-14-5</td>
<td>25 – &lt; 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tris HCl</td>
<td>CAS No 1185-53-1 EC No 214-684-5 REACH Reg. No 01-2120301688-54-xxxx</td>
<td>25 – &lt; 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tris</td>
<td>CAS No 77-86-1</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrogen Free Water</td>
<td>CAS No 7732-18-5</td>
<td>1 – &lt; 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DNA LINEARIZED VECTOR</td>
<td></td>
<td>&lt; 0.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Specific Conc. Limits</th>
<th>M-Factors</th>
<th>ATE</th>
<th>Exposure route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td></td>
<td>-</td>
<td>1,200 mg/kg</td>
<td>oral</td>
</tr>
</tbody>
</table>

For full text of abbreviations: see SECTION 16.

**SECTION 4: First aid measures**

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.
4.3 Indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media
Water jet

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Remove persons to safety.

For emergency responders
Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions
Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up
Advice on how to contain a spill
Covering of drains

Advice on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques
Use of adsorbent materials.

Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
  Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

- Packaging compatibilities
  Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This information is not available.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>DNEL</td>
<td>7.6 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>DNEL</td>
<td>433.3 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>Tris HCl</td>
<td>1185-53-1</td>
<td>DNEL</td>
<td>152.8 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>Tris HCl</td>
<td>1185-53-1</td>
<td>DNEL</td>
<td>216.6 mg/kg bw/day</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>0.088 mg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>0.009 mg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>1.35 mg/l</td>
<td>aquatic organisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
### Relevant PNECs of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>3.098 mg/kg</td>
<td>aquatic organisms</td>
<td>freshwater sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>0.31 mg/kg</td>
<td>aquatic organisms</td>
<td>marine sediment</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>PNEC</td>
<td>0.577 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>

#### 8.2 Exposure controls

**Appropriate engineering controls**
- General ventilation.

**Individual protection measures (personal protective equipment)**

**Eye/face protection**
- Wear eye/face protection.

**Skin protection**
- **Hand protection**
  - Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- **Other protection measures**
  - Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

**Respiratory protection**
- In case of inadequate ventilation wear respiratory protection.

**Environmental exposure controls**
- Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>not determined</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Boiling point or initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
</tbody>
</table>
### Flammability
- Flammability: non-combustible
- Lower and upper explosion limit: not determined
- Flash point: not determined
- Auto-ignition temperature: not determined
- Decomposition temperature: not relevant
- pH (value): not determined
- Kinematic viscosity: not determined

### Solubility(ies)
- Water solubility: miscible in any proportion

### Partition coefficient
- Partition coefficient n-octanol/water (log value): this information is not available

### Vapour pressure
- Vapour pressure: not determined

### Density and/or relative density
- Density: not determined
- Relative vapour density: information on this property is not available

### Particle characteristics
- Particle characteristics: not relevant (liquid)

### Other information

#### Information with regard to physical hazard classes
- Hazard classes acc. to GHS (physical hazards): not relevant

#### Other safety characteristics
- Miscibility: Completely miscible with water.
- Solvent content: 4.31 %
- Solid content: 95.69 %
SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability
The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
No known hazardous reactions.

10.4 Conditions to avoid
There are no specific conditions known which have to be avoided.

10.5 Incompatible materials
There is no additional information.

10.6 Hazardous decomposition products
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Test data are not available for the complete mixture.

Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)
This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity
Shall not be classified as acutely toxic.

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium dodecyl sulphate</td>
<td>2044-56-6</td>
<td>oral</td>
<td>1,200 (\text{mg/kg})</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.
Carcinogenicity
   Shall not be classified as carcinogenic.

Reproductive toxicity
   Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
   Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
   Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
   Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards
   There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity
   No data available.

12.2 Persistence and degradability
   Data are not available.

12.3 Bioaccumulative potential
   Data are not available.

12.4 Mobility in soil
   Data are not available.

12.5 Results of PBT and vPvB assessment
   Data are not available.

12.6 Endocrine disrupting properties
   Information on this property is not available.

12.7 Other adverse effects
   Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
   Sewage disposal-relevant information
      Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

   Waste treatment of containers/packagings
      It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied pack-
      ages can be recycled. Handle contaminated packages in the same way as the substance itself.
Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number not assigned
14.2 UN proper shipping name not assigned
14.3 Transport hazard class(es) not assigned
14.4 Packing group not assigned
14.5 Environmental hazards non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user
Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments
The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - Additional information not assigned
International Maritime Dangerous Goods Code (IMDG) - Additional information not assigned
International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information not assigned

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Relevant provisions of the European Union (EU)
Deco-Paint Directive
| VOC content | 0 % |

Industrial Emissions Directive (IED)
| VOC content | 0 % |

15.2 Chemical Safety Assessment
Chemical safety assessments for substances in this mixture were not carried out.
**SECTION 16: Other information**

### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>GHS</td>
<td>&quot;Globally Harmonized System of Classification and Labelling of Chemicals&quot; developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

### Key literature references and sources for data


Classification procedure
Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>

Disclaimer
This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.