SAFETY DATA SHEET

Dielectric Capillary Cleaning Powder - Alconox, Part Number 5190-1401

Section 1. Identification

1.1 Product identifier
Product name: Dielectric Capillary Cleaning Powder - Alconox, Part Number 5190-1401
Part no.: 5190-1401
Validation date: 11/3/2021

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses: Reagents and Standards for Analytical Chemistry Laboratory Use
0.227 kg

1.3 Details of the supplier of the safety data sheet
Supplier/Manufacturer: Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number
In case of emergency: CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture
OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:
H302 - ACUTE TOXICITY (oral) - Category 4
H330 - ACUTE TOXICITY (inhalation) - Category 2
H315 - SKIN IRRITATION - Category 2
H318 - SERIOUS EYE DAMAGE - Category 1
H335 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H400 - AQUATIC HAZARD (ACUTE) - Category 1

Ingredients of unknown toxicity: Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: > 60%

2.2 GHS label elements
Hazard pictograms:

Signal word: Danger
Hazard statements:
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H330 - Fatal if inhaled.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.

Precautionary statements:

Date of issue: 11/03/2021
Section 2. Hazards identification

**Prevention:**
- P280 - Wear protective gloves. Wear eye or face protection.
- P284 - In case of inadequate ventilation wear respiratory protection.
- P273 - Avoid release to the environment.
- P260 - Do not breathe dust.
- P270 - Do not eat, drink or smoke when using this product.
- P264 - Wash thoroughly after handling.

**Response:**
- P391 - Collect spillage.
- P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
- P362 + P364 - Take off contaminated clothing and wash it before reuse.
- P302 + P352 - IF ON SKIN: Wash with plenty of water.
- P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage:**
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**
- P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified:**
- None known.

Section 3. Composition/information on ingredients

**Substance/mixture:**
- Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>≥25 - ≤50</td>
<td>25155-30-0</td>
</tr>
<tr>
<td>Pentasodium triphosphate</td>
<td>≥25 - ≤50</td>
<td>7758-29-4</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>≥25 - ≤50</td>
<td>7722-88-5</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>≥10 - ≤25</td>
<td>497-19-8</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**4.1 Description of necessary first aid measures**

**Eye contact:**
Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation:**
Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact:**
Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Date of issue: 11/03/2021
Section 4. First aid measures

**Ingestion**
Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms/effects, acute and delayed

**Potential acute health effects**

- **Eye contact**: Causes serious eye damage.
- **Inhalation**: Fatal if inhaled. May cause respiratory irritation.
- **Skin contact**: Causes skin irritation.
- **Ingestion**: Harmful if swallowed.

**Over-exposure signs/symptoms**

- **Eye contact**: Adverse symptoms may include the following:
  - pain
  - watering
  - redness
- **Inhalation**: Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
- **Skin contact**: Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur
- **Ingestion**: Adverse symptoms may include the following:
  - stomach pains

4.3 Indication of immediate medical attention and special treatment needed, if necessary

- **Notes to physician**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **Specific treatments**: No specific treatment.
- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

- **Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.
- **Unsuitable extinguishing media**: None known.

5.2 Special hazards arising from the substance or mixture
Section 5. Fire-fighting measures

Specific hazards arising from the chemical: This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products: Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
- Sulfur oxides
- Phosphorus oxides
- Metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Section 7. Handling and storage

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**7.3 Specific end use(s)**

**Recommendations**

Industrial sector specific solutions

Not available.

Industrial applications, Professional applications.

Section 8. Exposure controls/personal protection

**8.1 Control parameters**

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>None.</td>
</tr>
<tr>
<td>Pentasodium triphosphate</td>
<td>None.</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 10 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. None.</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>None.</td>
</tr>
</tbody>
</table>

**8.2 Exposure controls**

**Appropriate engineering controls**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Date of issue: 11/03/2021
Section 8. Exposure controls/personal protection

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance**
- **Physical state**: Solid. [Granular solid.]
- **Color**: White.
- **Odor**: Slight
- **Odor threshold**: Not available.
- **pH**: 9.5 [Conc. (% w/w): 1%]
- **Melting point/freezing point**: Not available.
- **Boiling point, initial boiling point, and boiling range**: Not available.
- **Flash point**: Not applicable.
- **Evaporation rate**: Not available.
- **Flammability**: Not available.
- **Lower and upper explosion limit/flammability limit**: Not applicable.
- **Vapor pressure**: Not available.
- **Relative vapor density**: Not applicable.
- **Relative density**: 0.85 to 1.1
- **Density**: 0.85 to 1.1 g/cm³ [20°C (68°F)]
- **Solubility**: Partially soluble in the following materials: cold water and hot water.
- **Miscible with water**: No.
- **Partition coefficient: n-octanol/water**: Not applicable.
- **Auto-ignition temperature**: Not applicable.
- **Decomposition temperature**: Not available.
- **Viscosity**: Not applicable.
- **Particle characteristics**
  - **Median particle size**: Not available.

Section 10. Stability and reactivity

**10.1 Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability**: The product is stable.

**10.3 Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.

Date of issue: 11/03/2021
Section 10. Stability and reactivity

10.4 Conditions to avoid: No specific data.

10.5 Incompatible materials: May react or be incompatible with oxidizing materials. Reactive or incompatible with the following materials: acids.

10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>438 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Pentasodium tripophosphate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3120 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>LD50 Oral</td>
<td>Rat - Female</td>
<td>1624 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4090 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 250 ug</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 %</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 mg</td>
<td>-</td>
</tr>
<tr>
<td>Pentasodium tripophosphate</td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization
Not available.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Reproductive toxicity
Conclusion/Summary: Not available.

Teratogenicity
Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Pentasodium tripophosphate</td>
<td>Category 3</td>
<td>-</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Date of issue: 11/03/2021
Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact  : Causes serious eye damage.
Inhalation  : Fatal if inhaled. May cause respiratory irritation.
Skin contact  : Causes skin irritation.
Ingestion  : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact  : Adverse symptoms may include the following:
               pain
               watering
               redness
Inhalation  : Adverse symptoms may include the following:
               respiratory tract irritation
               coughing
Skin contact  : Adverse symptoms may include the following:
               pain or irritation
               redness
               blistering may occur
Ingestion  : Adverse symptoms may include the following:
               stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects  : Not available.
Potential delayed effects  : Not available.

Long term exposure

Potential immediate effects  : Not available.
Potential delayed effects  : Not available.

Potential chronic health effects

General  : No known significant effects or critical hazards.
Carcinogenicity  : No known significant effects or critical hazards.
Mutagenicity  : No known significant effects or critical hazards.
Reproductive toxicity  : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Date of issue: 11/03/2021
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Capillary Cleaning Powder - Alconox, Part Number 5190-1401</td>
<td>1032.5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.31</td>
</tr>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>438</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>0.31</td>
</tr>
<tr>
<td>Pentasodium triphosphate</td>
<td>3120</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>1624</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>4090</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>Acute EC50 29000 µg/l Fresh water</td>
<td>Algae - Chlorella pyrenoidosa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 7.81 mg/l Fresh water</td>
<td>Exponential growth phase</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.15 ppm Fresh water</td>
<td>Crustaceans - Ceriodaphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td>Pentasodium triphosphate</td>
<td>Acute LC50 1.18 ppm Fresh water</td>
<td>Daphnia pulex</td>
<td>48 hours</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>Acute EC50 276.61 mg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>48 hours</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>Acute LC50 391000 µg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1380 ppm Fresh water</td>
<td>Daphnia pulex</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC 100 mg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 242000 µg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 176000 µg/l Fresh water</td>
<td>Algae - Navicula seminulum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 265000 µg/l Fresh water</td>
<td>Crustaceans - Amphipoda</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 300000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>1.96</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Soil/water partition coefficient (<i>K<sub>OC</sub></i>) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Date of issue : 11/03/2021
Section 13. Disposal considerations

13.1 Waste treatment methods

**Disposal methods**: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not regulated.</td>
<td>UN3077</td>
<td>UN3077</td>
<td>UN3077</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.</td>
<td>SUBSTANCIA SOLIDA POTENCIALMENTE PELIGROSA PARA EL MEDIO AMBIENTE, N.E. P.</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.</td>
<td>Environmentally hazardous substance, solid, n. o.s.</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>9'</td>
<td>9'</td>
<td>9'</td>
<td>9'</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

**Additional information**: Reportable quantity 3333.3 lbs / 1513.3 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Date of issue**: 11/03/2021
Section 14. Transport information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

Exploding Limit and Limited Quantity Index : 5
Special provisions : 16, 99

Mexico Classification : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special provisions : 274, 331, 335

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Emergency schedules : F-A, S-F
Special provisions : 274, 335, 966, 967, 969

IATA : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.


Special provisions : A97, A158, A179, A197, A215

Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

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

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 311 : Sodium dodecylbenzenesulfonate; Pentasodium triphosphate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304 : Not applicable.

Composition/information on ingredients : No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312 : Not applicable.

Date of issue : 11/03/2021
**Section 15. Regulatory information**

**Classification**

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dodecylbenzenesulfonate</td>
<td>≥25 - ≤50</td>
<td>ACUTE TOXICITY (oral) - Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACUTE TOXICITY (inhalation) - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SKIN IRRITATION - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SERIOUS EYE DAMAGE - Category 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</td>
</tr>
<tr>
<td>Pentasodium triphosphate</td>
<td>≥25 - ≤50</td>
<td>SKIN IRRITATION - Category 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EYE IRRITATION - Category 2A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</td>
</tr>
<tr>
<td>Tetrasodium pyrophosphate</td>
<td>≥25 - ≤50</td>
<td>ACUTE TOXICITY (oral) - Category 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SERIOUS EYE DAMAGE - Category 1</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>≥10 - ≤25</td>
<td>EYE IRRITATION - Category 2A</td>
</tr>
</tbody>
</table>

**State regulations**

**Massachusetts**

The following components are listed: SODIUM DODECYLBENZENE SULFONATE; TRIPHOSPHORIC ACID, PENTASODIUM SALT; SODIUM PHOSPHATE, TRIBASIC; TETRASODIUM PYROPHOSPHATE

**New York**

The following components are listed: Sodium dodecylbenzene sulfonate; Dodecylbenzene sulfonate; Sodium phosphate, tribasic

**New Jersey**

The following components are listed: SODIUM DODECYLBENZENE SULFONATE; BENZENESULFONIC ACID, DODECYL-, SODIUM SALT; TETRASODIUM PYROPHOSPHATE; DIPHOSPHORIC ACID, TETRASODIUM SALT

**Pennsylvania**

The following components are listed: BENZENESULFONIC ACID, DODECYL-, SODIUM SALT; TRIPHOSPHORIC ACID, PENTASODIUM SALT; DIPHOSPHORIC ACID, TETRASODIUM SALT

**California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

**Australia**

All components are listed or exempted.

**Canada**

All components are listed or exempted.

**China**

All components are listed or exempted.

**Europe**

All components are listed or exempted.

**Date of issue:** 11/03/2021
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Country</th>
<th>Japan inventory (CSCL)</th>
<th>Japan inventory (ISHL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Not determined.</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>All components are active or exempted.</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>All components are listed or exempted.</td>
<td></td>
</tr>
</tbody>
</table>

Section 16. Other information

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACUTE TOXICITY (oral) - Category 4</td>
<td>Calculation method</td>
</tr>
<tr>
<td>ACUTE TOXICITY (inhalation) - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SKIN IRRITATION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SERIOUS EYE DAMAGE - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3</td>
<td>Calculation method</td>
</tr>
<tr>
<td>AQUATIC HAZARD (ACUTE) - Category 1</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

History

| Date of issue     | 11/03/2021           |
| Date of previous issue | 07/07/2020         |
| Version           | 8                    |

Key to abbreviations

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- N/A = Not available
- UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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