# Material safety data sheet

**Product name:** Neptune Cleaner

| | **Australian sponsor** | **New Zealand sponsor** |
|---|---|---|
| **Name:** | Stryker Australia | Stryker New Zealand |
| **Address:** | 8 Herbert Street<br>St Leonards NSW<br>Australia 2065 | 511 Mt Wellington Highway<br>Auckland, New Zealand 1060 |
| **Phone No:** | +61 02 9467 1000 | +64 09 573 1890 |
| **Fax No:** | +61 02 9467 1010 | +64 09 573 1891 |
| **Emergency:** | Poisons Information Centre:<br>Ph: 131 126 | Poisons and hazardous chemicals emergency:<br>Ph: 0800 764 766 |

# Neptune Cleaner

**Safety Data Sheet (SDS)**

## SECTION 1: IDENTIFICATION

### 1.1 Product Identifier:

**Product name:** Neptune Cleaner

### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

**Identified uses:** To clean the inside of a medical device that washes surgical fluid waste.

### 1.3 Details of the Supplier of the Safety Data Sheet (SDS):

**Supplier:** Stryker Distribution

6300 S. Sprinkle Road
Portage, Michigan 49002
United States
Phone: 1-269-389-3706

**Contact:** Melissa.Kann@stryker.com

**Manufacturer:** Stryker Instruments

4100 E. Milham Avenue
Kalamazoo, Michigan 49001
United States

### 1.4 Emergency Telephone Number:

**From Europe:** 00353 61 498200 (24 hrs)

**From US or Canada:** CHEMTREC 1-(800)-424-9300
For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC within the USA and Canada at 800-424-9300 or globally at 703-527-3887 (collect calls accepted).

# SECTION 2: HAZARDS IDENTIFICATION

## 2.1 Classification of the Substance or Mixture:

### 2.1.1 Classification in accordance with EC 1272/2008:

**Physical and chemical hazards:** Not classified

**Human health:** Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Eye Dam. 1 - H318

**Environment:** Not classified

### 2.1.2 Classification in accordance with GHS:

**Physical and chemical hazards:** Not classified

**Human health:** Acute Tox. 5 - H303, Skin Irrit. 2 - H315, Eye Dam. 1 - H318

**Environment:** Not classified

### 2.1.3 Classification in accordance with 29 CFR 1910 (OSHA HCS):

This product is hazardous under the OSHA Hazard Communication Standard (HCS).

### 2.1.4 Classification in accordance with HSNO:

Class 8.3 - Eye Corrosive

### 2.1.5 Classification in accordance with WHMIS:

Class E Corrosive - Causes severe eye and skin irritation upon contact.

### 2.1.6 Classification in accordance with HMIS:

**Health hazard:** 3

**Flammability:** 0

**Reactivity:** 0

### 2.1.7 Classification in accordance with NFPA:

**Health hazard:** 3

**Flammability:** 0

**Reactivity:** 0

## 2.2 Label Elements:

**Label in accordance with (EC) No. 1272/2008:**

**Hazard pictograms:**

**Signal word:** **Danger**

**Hazard statements:**

| | |
|---|---|
| **H303** | May be harmful if swallowed. |
| **H315** | Causes skin irritation. |

| | | |
|---|---|---|
| | **H318** | Causes serious eye damage. |
| **Precautionary statements:** | **P264** | Wash hands thoroughly after handling. |
| | **P280** | Wear protective gloves/protective clothing/eye protection/face protection. |
| | **P302 + P352** | If on skin: Wash with plenty of soap and water. |
| | **P305 + P351 + P338** | If in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | **P332 + P313** | Immediately call a poison center or doctor/physician. |
| | **P332 + P313** | If skin irritation occurs: Get medical advice/attention. |
| | **P362** | Take off contaminated clothing and wash before reuse. |

### 2.3 Other Hazards:

No additional information available.

#### 2.3.1 Potential Health Effects:

| | |
|---|---|
| **Inhalation:** | Avoid inhalation of spray. Inhalation of mist may cause slight irritation of throat and lungs. |
| **Ingestion:** | May be harmful if swallowed. |
| **Skin:** | Brief contact may cause slight irritation. Prolonged contact may cause more severe irritation and discomfort, seen as local redness and swelling. |
| **Eyes:** | May be irritating to skin and eyes. |

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances:

This product is a preparation.

### 3.2 Mixtures:

| **Product Name:** | **Product Identifier:** | | **Percent Range:** | **GHS Classification (EC1272/2008):** |
|---|---|---|---|---|
| Sodium Lauryl Sulfate | CAS No:<br>EC No: | 151-21-3<br>205-788-1 | 10-30% | Acute Tox. 4 - H302<br>Skin Irrit. 2 - H315<br>Eye Dam. 1 - H318<br>Aquatic Chronic 3 - H412 |
| Ammonia,<br>Aqueous Solution | CAS No:<br>EC No: | 1336-21-6<br>215-647-6 | 0-1% | Skin Corr. 1B - H314<br>Aquatic Acute 1 - H400 |
| Alcohol Ethoxylate | CAS No: | 84133-50-6 | 1-10% | Skin Irrit. 2 - H315<br>Eye Dam. 1 - H318 |
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, Ethoxylated | CAS No:<br>EC No: | 25322-68-3<br>500-038-2 | 0-1% | STOT SE 3 - H335 |
| Diammonium Dihydrogen Ethylenediaminetetraacetate | CAS No:<br>EC No: | 20824-56-0<br>244-063-4 | 0-1% | Acute Tox. 4 - H332<br>STOT RE 2 - H373 |
| Water | CAS No: | 7732-18-5 | 40-60% | N/A |

**Note:** The full text for all R-Phrases and Hazard Statements are displayed in *Section 16*.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of First Aid Measures:

**Inhalation:** If irritation occurs; remove to fresh air. Seek medical assistance if irritation persists.

**Ingestion:** If individual is conscious and alert, give 1–2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave individual unattended.

**Skin:** Wash area thoroughly with water, then with soap and water. Contaminated clothing should be washed before reuse.

**Eyes:** Immediately flush eyes, including under the eyelids, with running water for 15 minutes. Seek medical assistance if irritation persists.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

**General information:** May be irritating to skin and eyes.

**Inhalation:** Avoid inhalation of spray. Inhalation of mist may cause slight irritation of throat and lungs.

**Ingestion:** May be harmful if swallowed.

**Skin:** Brief contact may cause slight irritation. Prolonged contact may cause more severe irritation and discomfort, seen as local redness and swelling.

**Eyes:** Causes irritation, experienced as pain, with excessive blinking and tear production.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing Media:

Water (fog) or foam for large fires. CO2 or dry chemicals for small fires.

### 5.2 Special Hazards Arising from the Substance or Mixture:

**Hazardous combustion products:** Water must be boiled off before product components will burn. Burning produces oxides of carbon and sulfur in large fires.

**Unusual fire and explosion hazards:** None

**Specific hazards:** None

### 5.3 Advice for Firefighters:

**Special firefighting procedures:** Use water to cool containers exposed to a fire.

**Protective equipment for firefighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use protective equipment appropriate for surrounding materials.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:

Follow precautions for safe handling described in this SDS. In case of spills, beware of slippery floors and surfaces.

### 6.2 Environmental Precautions:

Do not discharge into drains, water courses, or onto the ground.

### 6.3 Methods and Material for Containment and Cleaning Up:

Recover as much of the material as practical. Soak up remainder with sand, vermiculite, or other inert absorbent material and haul to an approved dump in accordance with federal, state, and local regulations. Wash contaminated area with copious amounts of water and flush into sanitary sewer line(s). Avoid direct discharge into natural waterways.

# SECTION 7: HANDLING AND STORAGE

## 7.1 Precautions for Safe Handling:

Wash hands thoroughly after handling. Do not get in eyes. Avoid skin and clothing contact.

## 7.2 Conditions for Safe Storage, Including any Incompatibilities:

Containers should be stored at temperatures between 55-100˚F for product stability. Do not store with strong oxidizing agents. Avoid excessive heat.

## 7.3 Specific End Use(s):

The identified uses for this product are detailed in *Section 1.2*.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control Parameters:

No occupational exposure limits noted for ingredient(s).

## 8.2 Exposure Controls:

### 8.2.1 Engineering measures:

No special controls needed.

### 8.2.2 Protective equipment:

**Eye protection:** Chemical goggles with side-shields.

**Skin protection:** Protective gloves, long sleeved shirt, trousers, and resistant footwear. Apron may be used.

**Other protection:** Provide eye wash station and safety shower where splashing is probable.

### 8.2.3 Environmental exposure controls:

Do not discharge into drains, water courses, or onto the ground.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on Basic Physical and Chemical Properties:

| | | | |
|---|---|---|---|
| **Appearance:** | Liquid | **Vapor Pressure:** | <25 mm Hg at 25˚C |
| **Odor:** | Slight odor | **Vapor Density:** | No data |
| **Odor Threshold:** | No data | **Relative Density:** | 1.01-1.03 |
| **pH:** | 7.0-9.5 | **Bulk Density:** | 8.6-8.8 lb at 77˚F (25˚C), gal |
| **Melting Point/Freezing Point:** | No data | **Solubility(ies):** | Infinite |
| **Initial Boiling Point** | Begins foaming about 200˚F | **Partition Coefficient:** | No data |
| **Flash Point:** | No data | **Auto Ignition Temperature:** | No data |
| **Evaporation Rate:** | No data | **Decomposition Temperature:** | No data |
| **Flammability:** | No data | **Viscosity:** | No data |
| **Flammability Limit – Lower** | No data | **Explosive Properties:** | No data |
| **Flammability Limit –Upper** | No data | **Oxidizing Properties:** | No data |

## 9.2 Other Information:

No other information.

# SECTION 10: STABILITY AND REACTIVITY

## 10.1 Reactivity:

Reacts with strong oxidizers, and strongly acidic solutions.

## 10.2 Chemical Stability:

Stable under normal temperature conditions and recommended use.

## 10.3 Possibility of Hazardous Reactions:

**Reaction with:** Strong oxidizers, and strongly acidic solutions.

**Hazardous polymerization:** Will not polymerize.

## 10.4 Conditions to Avoid:

Strong oxidizers. Do not mix with strongly acidic solutions.

## 10.5 Incompatible Materials:

**Materials to avoid:** Do not mix with strong oxidizers or strongly acidic solutions.

## 10.6 Hazardous Decomposition Products:

None

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1 Information on Toxicological Effects:

### 11.1.1 Toxicological information:

No data

### 11.1.2 Acute toxicity:

No data

**11.1.3 Skin corrosion/irritation:**

Irritating

**11.1.4 Serious eye damage/irritation:**

No data

**11.1.5 Respiratory or skin sensitization:**

| | | | |
|---|---|---|---|
| **Respiratory sensitization:** | No data | **Skin sensitization:** | No data |

**11.1.6 Germ cell mutagenicity:**

| | | | |
|---|---|---|---|
| **Genotoxicity - In Vitro:** | No data | **Genotoxicity - In Vivo:** | No data |

**11.1.7 Carcinogenicity:**

| | | | |
|---|---|---|---|
| **IARC Carcinogenicity:** | No data | **NTP Carcinogenicity:** | No data |

**11.1.8 Specific target organ toxicity - single exposure:**

| | | | |
|---|---|---|---|
| **STOT - Single exposure:** | No data | **STOT - Repeated exposure:** | No data |

**11.1.9 Route of entry:**

No data

**11.1.10 Target organs:**

No data

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:

No data

### 12.2 Toxicity:

| | |
|---|---|
| **Acute Toxicity - Fish:** | No data |
| **Acute Toxicity - Aquatic Invertebrates:** | No data |
| **Acute Toxicity - Aquatic Plants:** | No data |

### 12.3 Persistence and Degradability:

**Degradability:** The major component of this product is readily biodegradable.

### 12.4 Degradability:

**Bioaccumulative potential:** No data

### 12.5 Mobility in Soil:

**Mobility:** Infinite

### 12.6 Results of PBT and vPvB Assessment:

This product does not contain any PBT or vPvB substances.

### 12.7 Other Adverse Effects:

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 General Information:

Dispose in accordance with local, state, or federal regulations.

### 13.2 Waste Treatment Methods:

Do not dump into any sewers, on the ground, or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Dispose of all waste in accordance with local, state, and federal regulations covering solid waste disposal.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN Number:

Not applicable

### 14.2 UN Proper Shipping Name:

Not applicable

### 14.3 Transport Hazard Class(es):

No transport warning sign required.

### 14.4 Packing Group:

Not applicable

### 14.5 Environmental Hazards:

Environmentally Hazardous Substance/Marine Pollutant: No

### 14.6 Special Precautions for User:

Not applicable

### 14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code:

Not applicable

# SECTION 15: REGULATORY INFORMATION

## 15.1 International Legislation:

15.1.1 **EU Legislation:** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.1.2 **Canadian Regulations:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

15.1.3 **Australian Regulations:** **Carcinogen Classification Under WHS Regulation 2011, Schedule 10:** Not listed
**Standard for the Uniform Scheduling of Medicines & Poisons:** Sodium lauryl sulfate

15.1.4 **US Regulations:** This SDS was prepared in accordance with the (US) Hazard Communication Standard (29 CFR 1910.1200).

**California Prop 65:** Not listed
**Massachusetts "Right-To-Know" List:** Ammonia, aqueous solution
**New Jersey "Right-To-Know" List:** Ammonia, aqueous solution
**Pennsylvania "Right-To-Know" List:** Not listed

## 15.2 International Inventories:

| | |
|---|---|
| **EU - EINECS/ELINCS:** | Sodium lauryl sulphate Ammonia, aqueous solution Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy-Ethane-1,2-diol, ethoxylated Diammonium dihydrogen ethylenediaminetetraacetate |
| **Canada - DSL/NDSL:** | All listed on DSL |
| **US - TSCA:** | Not listed |
| **Australia - AICS:** | All listed |
| **Japan - MITI:** | All listed |
| **Korea - KECI:** | All listed |
| **China - IECSC:** | All listed |
| **Philippines - PICCS:** | All listed |
| **New Zealand - NZIOC:** | All listed |

## 15.3 Chemical Safety Assessment:

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

| | | |
|---|---|---|
| **Indication of changes:** | SDS updated to reflect GHS and formatting of document. | |
| **Revision date:** | 01/2016 | |
| **Revision:** | A | |
| **Hazard statements in full:** | **H303** | May be harmful if swallowed. |
| | **H315** | Causes skin irritation. |
| | **H318** | Causes serious eye damage. |
| | **H302** | Harmful if swallowed. |
| | **H412** | Harmful to aquatic life with long-lasting effect. |
| | **H314** | Causes severe skin burns and eye damage. |
| | **H400** | Very toxic to aquatic life. |
| | **H335** | May cause respiratory irritation. |
| | **H332** | Harmful if inhaled. |
| | **H373** | May cause damage to organs through prolonged or repeated exposure. |

**Disclaimer**

The foregoing information has been compiled by Stryker from sources it considers reliable and as of the date of this document, is believed to be accurate to the best of Stryker's knowledge. Before using the product identified hereon, all of the foregoing information should be carefully considered. The information herein applies only to the product identified hereon and does not relate to its use in combination with any other material or in any process. The information is provided in good faith to comply with applicable laws. However, no warranty or representation of law or fact, with respect to such information, is intended or given.

**Stryker Instruments**
4100 E. Milham
Kalamazoo, Michigan
(USA) 49001
1-269-323-7700
1-800-253-3210

stryker