



# SAFETY DATA SHEET

## SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH

Safety Data Sheet according to Reg. (EU) No 2015/830

**Product name:** AMBERLITE™ HPR4800 CI Ion Exchange Resin

**Revision Date:** 15.10.2018

**Version:** 1.1

**Print Date:** 03.05.2021

SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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### 1.1 Product identifier

**Product name:** AMBERLITE™ HPR4800 CI Ion Exchange Resin

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

**Identified uses:** Ion exchange and/or Adsorption process

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

#### COMPANY IDENTIFICATION

SPECIALTY ELECTRONIC MATERIALS  
SWITZERLAND GMBH  
GROSSMATTE 4  
6014 LUZERN  
SWITZERLAND

#### Customer Information Number:

800-3876-6838

SDSQuestion-EU@dupont.com

### 1.4 EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** +(41)- 435082011

**Local Emergency Contact:** +(44)-870-8200418

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## SECTION 2: HAZARDS IDENTIFICATION

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### 2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

### 2.3 Other hazards

No data available

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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**Chemical nature:** Quaternary ammonium divinylbenzene/styrene copolymer.

### 3.2 Mixtures

This product is a mixture.

This product does not contain, in concentrations equal to or greater than those laid down by the Regulation (EC) No. 2015/830, any substances presenting a health or environmental hazard nor any substances for which there are Community workplace exposure limits in place.

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## SECTION 4: FIRST AID MEASURES

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### 4.1 Description of first aid measures

**Skin contact:** Wash off with soap and water. If skin irritation persists, call a physician.

**Eye contact:** Rinse with plenty of water. If eye irritation persists, consult a specialist.

**4.2 Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

**Notes to physician:** Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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## SECTION 5: FIREFIGHTING MEASURES

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### 5.1 Extinguishing media

**Suitable extinguishing media:** Water spray Carbon dioxide (CO<sub>2</sub>) Foam Dry chemical

**Unsuitable extinguishing media:** No data available

### 5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products:** No data available

**Unusual Fire and Explosion Hazards:** Cool closed containers exposed to fire with water spray. Exposure to decomposition products may be a hazard to health.

### 5.3 Advice for firefighters

**Fire Fighting Procedures:** Remain upwind. Avoid breathing smoke.

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**6.1 Personal precautions, protective equipment and emergency procedures:** Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

**6.2 Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**6.3 Methods and materials for containment and cleaning up:** Keep spectators away. Floor may be slippery; use care to avoid falling. Transfer spilled material to suitable containers for recovery or disposal.

**6.4 Reference to other sections:** References to other sections, if applicable, have been provided in the previous sub-sections.

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## SECTION 7: HANDLING AND STORAGE

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**7.1 Precautions for safe handling:** NOTE: This product as supplied is a whole bead resin and may produce slight eye irritation. However, the ground form of this resin should be treated as a severe eye irritant. Worker exposure to ground resins can be controlled with local exhaust ventilation at the point of dust generation, or use of suitable personal protective equipment (dust/mist air-purifying respirator and safety goggles). Avoid repeated freeze-thaw cycles; beads may fracture. If frozen, thaw at room temperature. Properly designed equipment is vital if these resins are to be used in conjunction with strong oxidizing agents such as nitric acid to prevent a rapid build-up of pressure and possible explosion. Consult a source knowledgeable in the handling of these materials before proceeding.

**7.2 Conditions for safe storage, including any incompatibilities:** Keep in a dry, cool place. Keep container tightly closed.

**7.3 Specific end use(s):** See the technical data sheet on this product for further information.  
**Other data:** CAUTION: Do not pack column with dry ion exchange resins. Dry beads expand when wetted; this expansion can cause glass column to shatter.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1 Control parameters

Exposure limits are listed below, if they exist.

### 8.2 Exposure controls

**Engineering controls:** none

**Protective measures:** Facilities storing or utilizing this material should be equipped with an eyewash facility.

### Individual protection measures

**Eye/face protection:** Safety glasses

**Skin protection****Hand protection:** Wear suitable gloves.**Respiratory protection:** No personal respiratory protective equipment normally required.**Environmental exposure controls**

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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**9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	solid Beads
<b>Color</b>	White to yellow
<b>Odor</b>	Amines
<b>Odor Threshold</b>	No data available
<b>pH</b>	Not applicable
<b>Melting point/range</b>	0 °C Water
<b>Freezing point</b>	No data available
<b>Boiling point (760 mmHg)</b>	100 °C Water
<b>Flash point</b>	No data available
<b>Evaporation Rate (Butyl Acetate = 1)</b>	<1.0
<b>Flammability (solid, gas)</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Relative Vapor Density (air = 1)</b>	No data available
<b>Relative Density (water = 1)</b>	1.06 - 1.10
<b>Water solubility</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Kinematic Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available

**9.2 Other information**

<b>Molecular weight</b>	No data available
<b>Percent volatility</b>	55 - 65 %
<b>Particle size</b>	0.3 - 1.2 mm

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## SECTION 10: STABILITY AND REACTIVITY

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**10.1 Reactivity:** No data available

**10.2 Chemical stability:** No data available

**10.3 Possibility of hazardous reactions:** Stable under normal conditions.  
Product will not undergo polymerization.

**10.4 Conditions to avoid:** No data available

**10.5 Incompatible materials:** Avoid contact with the following: Strong Oxidizers Nitric acid

**10.6 Hazardous decomposition products:** Thermal decomposition may yield the following:  
monomer vapors

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## SECTION 11: TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data is available.*

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

LD50, Rat, > 5,000 mg/kg

##### Acute dermal toxicity

LD50, Rabbit, > 5,000 mg/kg

##### Acute inhalation toxicity

Product test data not available. Refer to component data.

#### Skin corrosion/irritation

Product test data not available. Refer to component data.

#### Serious eye damage/eye irritation

Product test data not available. Refer to component data.

#### Sensitization

Product test data not available. Refer to component data.

#### Specific Target Organ Systemic Toxicity (Single Exposure)

Product test data not available. Refer to component data.

#### Specific Target Organ Systemic Toxicity (Repeated Exposure)

Product test data not available. Refer to component data.

**Carcinogenicity**

Product test data not available. Refer to component data.

**Teratogenicity**

Product test data not available. Refer to component data.

**Reproductive toxicity**

Product test data not available. Refer to component data.

**Mutagenicity**

Product test data not available. Refer to component data.

**Aspiration Hazard**

Product test data not available. Refer to component data.

**Additional information**

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

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**SECTION 12: ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

**General Information**

Limited effects are expected from exposure of the environmental compartments by insoluble plastic beads of large diameter (300 to 1200 microns).

**12.1 Toxicity**

No data available.

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**13.1 Waste treatment methods**

Can be landfilled or incinerated, when in compliance with local regulations.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

**Contaminated packaging:** Empty containers should be taken to local recyclers for disposal. Refer to applicable federal, state, and local regulations.

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**SECTION 14: TRANSPORT INFORMATION**

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**Classification for ROAD and Rail transport (ADR/RID):**

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|-----------------------------------|---|
| 14.1 UN number                    | Not applicable  |
| 14.2 UN proper shipping name      | Not regulated for transport                                       |
| 14.3 Transport hazard class(es)   | Not applicable  |
| 14.4 Packing group                | Not applicable  |
| 14.5 Environmental hazards        | Not considered environmentally hazardous based on available data. |
| 14.6 Special precautions for user | No data available.  |

**Classification for SEA transport (IMO-IMDG):**

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|---|---|
| 14.1 UN number  | Not applicable  |
| 14.2 UN proper shipping name  | Not regulated for transport                                 |
| 14.3 Transport hazard class(es)   | Not applicable  |
| 14.4 Packing group  | Not applicable  |
| 14.5 Environmental hazards  | Not considered as marine pollutant based on available data. |
| 14.6 Special precautions for user   | No data available.  |
| 14.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code | Consult IMO regulations before transporting ocean bulk      |

**Classification for AIR transport (IATA/ICAO):**

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|-----------------------------------|-----------------------------|
| 14.1 UN number                    | Not applicable              |
| 14.2 UN proper shipping name      | Not regulated for transport |
| 14.3 Transport hazard class(es)   | Not applicable              |
| 14.4 Packing group                | Not applicable              |
| 14.5 Environmental hazards        | Not applicable              |
| 14.6 Special precautions for user | No data available.          |

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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## SECTION 15: REGULATORY INFORMATION

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

#### REACH Regulation (EC) No 1907/2006

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH). Polymers are exempted from registration under REACH. All relevant starting materials and additives have been either pre-registered, registered, or are exempt from registration to Regulation (EC) No. 1907/2006 (REACH). The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer's/user's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

#### Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: Not applicable

### 15.2 Chemical safety assessment

Not applicable

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## SECTION 16: OTHER INFORMATION

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### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

This product is not classified as dangerous according to EC criteria.

#### Revision

Identification Number: 101170043 / A715 / Issue Date: 15.10.2018 / Version: 1.1

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

#### Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.



SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.