

# **SAFETY DATA SHEET**

# SPECIALTY ELECTRONIC MATERIALS SWITZERLAND GMBH

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

Product name: AMBERJET™ 1200 H Resin Revision Date: 16.10.2018

Version: 3.0

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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.

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

1.1 Product identifier

Product name: AMBERJET™ 1200 H 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

#### SECTION 2: HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

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

Serious eve damage - Category 1 - H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

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

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# **Hazard pictograms**



Signal word: DANGER

**Hazard statements** 

H318 Causes serious eye damage.

**Precautionary statements** 

P280 Wear eye protection/ face protection.

P305 + P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

+ P338 + if present and easy to do. Continue rinsing. Immediately call a POISON

P310 CENTER/doctor.

**Contains** Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

**2.3 Other hazards**No data available

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature: Sulfonated divinylbenzene/styrene copolymer.

3.2 Mixtures

This product is a mixture.

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration		Classification: REGULATION (EC) No 1272/2008
CASRN 69011-20-7 EC-No. Polymer Index-No.	-	>= 50.0 - < 60.0 %	Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form	Eye Dam 1 - H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

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## **SECTION 4: FIRST AID MEASURES**

## 4.1 Description of first aid measures

Inhalation: Move to fresh air.

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

**Eye contact:** Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Get prompt medical attention.

**Ingestion:** Drink two glasses of water. If vomiting occurs spontaneously, keep airway clear. If symptoms persist, call a physician.

- **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 should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

# **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

Suitable extinguishing media: Water spray Carbon dioxide (CO2) Foam Dry chemical

Unsuitable extinguishing media: No data available

## 5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products:** Combustion generates toxic fumes of the following: Carbon oxides Sulfur oxides.

Unusual Fire and Explosion Hazards: Cool closed containers exposed to fire with water spray.

## 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.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**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.

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**6.2 Environmental precautions:** WARNING: KEEP SPILLS OF PRODUCT AS SUPPLIED OUT OF MUNICIPAL SEWERS AND OPEN BODIES OF WATER. DO NOT DISCHARGE CLEANING RUNOFFS DIRECTLY TO OPEN BODIES OF WATER. 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.

## **SECTION 7: HANDLING AND STORAGE**

- **7.1 Precautions for safe handling:** Avoid repeated freeze-thaw cycles; beads may fracture. If frozen, thaw at room temperature. Avoid contact with eyes, skin and clothing. See SECTION 8, Exposure Controls/Personal Protection, prior to handling. Do not get in eyes. This material is a severe irritant.
- **7.2 Conditions for safe storage, including any incompatibilities:** Keep from freezing. 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.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

## 8.2 Exposure controls

**Engineering controls:** None required under normal operating conditions.

**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**

## 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state Beads
Color brown

Odor No data available
Odor Threshold No data available

**pH** 2.5 - 5.0 Aqueous slurry

Melting point/range 0 °C Water

Freezing point

Boiling point (760 mmHg)

No data available

100.00 °C Water

Flash point

Not applicable

Evaporation Rate (Butyl Acetate <1.00

= 1)

Flammability (solid, gas)

Lower explosion limit

Upper explosion limit

Vapor Pressure

Relative Vapor Density (air = 1)

Relative Density (water = 1)

Not applicable

Not applicable

22 hPa at 20 °C

<1.0000 Water

1.1800 - 1.2300

Water solubility insoluble

Partition coefficient: n- No data available

octanol/water

Auto-ignition temperatureca.500.00 °CDecomposition temperatureNo data availableDynamic ViscosityNot ApplicableKinematic ViscosityNo data availableExplosive propertiesNo data availableOxidizing propertiesNo data available

9.2 Other information

Molecular weight No data available
Percent volatility 48.00 - 52.00 % Water

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

## **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity: No data available

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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

10.6 Hazardous decomposition products: Thermal decomposition may yield the following:

monomer vapors

# **SECTION 11: TOXICOLOGICAL INFORMATION**

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

# 11.1 Information on toxicological effects Acute toxicity

## Acute oral toxicity

Product test data not available. Refer to component data.

## **Acute dermal toxicity**

Product test data not available. Refer to component data.

## 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.

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## 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.

## COMPONENTS INFLUENCING TOXICOLOGY:

# Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

# Acute oral toxicity

Typical for this family of materials. LD50, Rat, > 5,000 mg/kg

## Acute dermal toxicity

The dermal LD50 has not been determined.

#### Skin corrosion/irritation

Brief contact is essentially nonirritating to skin.

## Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

## Sensitization

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

## Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

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

No relevant data found.

#### Carcinogenicity

No relevant data found.

#### **Teratogenicity**

No relevant data found.

#### Reproductive toxicity

No relevant data found.

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## Mutagenicity

Reverse mutation test using bacteria: Non-mutagenic with and without metabolic activation

## **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

## **SECTION 12: ECOLOGICAL INFORMATION**

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

## **General Information**

There is no data available for this product.

## 12.1 Toxicity

# <u>Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form</u> Acute toxicity to fish

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

## 12.2 Persistence and degradability

# Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

**Biodegradability:** No appreciable biodegradation is expected.

## 12.3 Bioaccumulative potential

## Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

**Bioaccumulation:** No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

## 12.4 Mobility in soil

## Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

## 12.5 Results of PBT and vPvB assessment

# Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

## 12.6 Other adverse effects

## Sulfonated polymer of styrene, ethylstyrene and divinylbenzene in the hydrogen form

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

## SECTION 13: DISPOSAL CONSIDERATIONS

## 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.

## **SECTION 14: TRANSPORT INFORMATION**

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

**14.1 UN number** Not applicable

**14.2 UN proper shipping name** Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 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):

**14.1 UN number** Not applicable

**14.2 UN proper shipping name** Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 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

Consult IMO regulations before transporting ocean bulk

Code

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

**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.

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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.

# **SECTION 15: REGULATORY INFORMATION**

# 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 sluser's responsibility to ensure thathis/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

# **SECTION 16: OTHER INFORMATION**

Full text of H-Statements referred to under sections 2 and 3.

H318 Causes serious eye damage.

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

Eye Dam. - 1 - H318 - Calculation method

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

## Legend

Eye Dam. Serious eye damage

## Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG -International Maritime Dangerous Goods: IMO - International Maritime Organization: ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose): MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory: TRGS - Technical Rule for Hazardous Substances: TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

## 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.

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