

**TOOLMAKER SUPPLIES LTD
UNIT 1, BRITANNIA BUSINESS
CENTRE, BRITANNIA WAY
MALVERN, England
WR14 1GZ
UNITED KINGDOM**

0001629307/IE

Dear Customer,

Please find enclosed Safety Data Sheets (SDS's) for the Rohm and Haas products supplied to you.

These SDS's have been mailed because this product is being supplied to you for the first time, or because the SDS has been recently revised.

The documents have been compiled to comply with the stipulations of the currently applicable EU directives on SDS's as implemented in the Member States under various national regulations.

Whilst there is no obligation on suppliers to provide SDS's for substances and preparations not covered by the above mentioned regulations, there is a requirement for us under the Responsible Care programme to make general Health and Safety information available to allow the safe use of our products. We have chosen to provide this information in the standardised SDS format.

Please replace and discard any previous versions of these Safety Data Sheets.

If you have any questions regarding the content of these documents, please do not hesitate to contact your nearest Rohm and Haas sales office.

17.03.2014



SAFETY DATA SHEET

Safety Data Sheet according to Reg. (EC) N. 453/2010 .

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name AMBERLITE™ MB9L 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

Supplier ROHM AND HAAS EUROPE TRADING APS
UK BRANCH
A Subsidiary of The Dow Chemical Company
HERALD WAY
COVENTRY, ENG CV3 2RQ United Kingdom

E-mail address: SDSQuestion@dow.com

For non-emergency information contact: (31) 115 67 2626

1.4 Emergency telephone number
+31 115 694982

Local emergency telephone number
00 31 115 69 4982

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SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Irritant - Xi - R41

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according to EC Directives:

Hazard pictograms



Hazard symbols

Xi Irritant

Risk Phrases

R41 Risk of serious damage to eyes.

Safety phrases

S22 Do not breathe dust.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 Wear eye/face protection.

2.3 Other hazards

no data available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

This product is a mixture.

CAS-No. / EINECS-No. / Index-No.	REACH Registration Number	Concentration	Component	Classification
CAS-No. 69011-20-7 EINECS-No. - Index-No. -	Not subject to registration	25,0 - < 40,0 %	Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form	Eye Dam. - 1 - H318
CAS-No. 69011-18-3 EINECS-No. - Index-No. -	Not subject to registration	15,0 - < 20,0 %	Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide	Eye Dam. - 1 - H318

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

CAS-No. / EINECS-No. / Index-No.	Concentration	Component	Classification
CAS-No. 69011-20-7 EINECS-No. - Index-No.	25,0 - < 40,0 %	Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form	Xi - R41

-			
CAS-No. 69011-18-3 EINECS-No. - Index-No. -	15,0 - < 20,0 %	Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide	Xi - R41

For the full text of the R-phrases mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

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: Use the following extinguishing media when fighting fires involving this material:

Water spray

Carbon dioxide (CO₂)

Foam

Dry chemical

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Cool closed containers exposed to fire with water spray.

Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

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

Further information: Remain upwind.

Avoid breathing smoke.

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.

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

No information available.

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 skin, eyes and clothing. Corrosive to eyes See SECTION 8, Exposure Controls/Personal Protection, prior to handling. 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

Further information on storage conditions: Keep in a dry, cool place. Keep container tightly closed.

7.3 Specific end uses

Further information:

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

Exposure limits are listed below, if they exist.

8.2 Exposure controls

Engineering measures: 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Beads
Colour	gold
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/range	0 °C Water
Boiling point/boiling range	100 °C Water
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	22,0 hPa at 20 °C
Relative vapour density	no data available
Relative density	0,75
Water solubility	practically insoluble
Partition coefficient: n-octanol/water	no data available
Autoignition temperature	500 °C
Decomposition temperature	no data available
Viscosity, dynamic	no data available
Explosive properties	no data available
Oxidizing properties	no data available

9.2 Other information

Percent volatility	48 - 68 %
Solubility in other solvents	no data available

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

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

Stable under normal conditions.

polymerisation 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,

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Component: Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form

LD50, rat, > 2 000 mg/kg

Component: Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide

LC50, rat, female, > 2 000 mg/kg

Acute dermal toxicity

no data available

Acute inhalation toxicity

Component: Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form

Toxicity data for a compositionally similar material., LC50, 4 Hour, vapour, rat, 11 mg/l

Skin corrosion/irritation

Component: Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form
rabbit OECD Test Guideline 404 4 Hour non-irritating

Component: Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide

rabbit OECD Test Guideline 404 4 Hour No skin irritation

Serious eye damage/eye irritation

Risk of serious damage to eyes.

Sensitisation

no data available

Carcinogenicity
no data available

Mutagenicity

Component: Styrene, Divinylbenzene and Ethylstyrene Copolymer, Sulfonated, Hydrogen Form
Reverse mutation test using bacteria: Non-mutagenic with and without metabolic activation

Component: Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide

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

Reproductive toxicity
no data available

Specific Target Organ Systemic Toxicity (Single Exposure)
no data available

Specific Target Organ Systemic Toxicity (Repeated Exposure)
no data available

Aspiration Hazard
no data available

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

Laboratory tests showed an increase in pH within one minute of exposing strong acid cation in hydrogen form (SAC H) and strong base anion in hydroxyl form (SBA OH) mixed bed resins to a 1% NaCl solution. This pH effect is likely to result in severe irritation to the eye for exposure to the product as supplied.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity to fish
no data available

Acute toxicity to aquatic invertebrates
no data available

Acute toxicity to algae
no data available

Toxicity to bacteria
no data available

Chronic aquatic toxicity

Chronic toxicity to fish
no data available

Chronic toxicity to aquatic invertebrates
no data available

Toxicity to soil-dwelling organisms
no data available

Toxicity to terrestrial plants
no data available

Toxicity to other non-mammalian terrestrial species
no data available

12.2 Persistence and degradability

Biodegradability
no data available

Physico-chemical removability
no data available

12.3 Bioaccumulative potential

Bioaccumulation
no data available

12.4 Mobility in soil

Partition coefficient: n-octanol/water
no data available

Distribution among environmental compartments
no data available

Fate and behaviour in the environment
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects

Hazardous to the ozone layer
no data available

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

European Waste Catalogue (2000/532/EC) 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.

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

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

13.2 Additional information

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):
Not regulated for transport

Classification for SEA transport (IMO-IMDG):
Not regulated for transport

Classification for AIR transport (IATA/ICAO):
Not regulated for transport

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.

SECTION 15. REGULATORY INFORMATION

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

European Inventory of Existing Commercial Chemical Substances (EINECS) (EINECS): This product satisfies all the requirements of the European Inventory of Existing Chemical Substances (EINECS).

United States TSCA Inventory (US.TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

No information available.

15.2 Chemical Safety Assessment

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.

Full text of R-phrases referred to under sections 2 and 3
R41 Risk of serious damage to eyes.

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAc	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior MSDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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