



MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

AMBERLITE® IRN-150 Resin

Product Code : 69855
Key : 891090-3
MSDS Date : 07/22/91
Supersedes : 11/08/88

Rohm and Haas Hazard Rating		Scale
Toxicity	1	4=EXTREME 3=HIGH
Fire	1	2=MODERATE 1=SLIGHT
Reactivity	0	0=INSIGNIFICANT
Special	-	

Product as supplied is a mixed bed ion exchange resin, strongly acidic cation, hydrogen ion form and strongly basic anion, hydroxide ion form.

COMPONENT INFORMATION

No.	CAS REG NO.	AMT.(%)
1 Sulfonated divinylbenzene/styrene copolymer, H ion form	39389-20-3	35-50
2 Quat amine divinylbenzene/styrene copolymer, OH ion form	9017-79-2	
3 Water	7732-18-5	50-65

EMERGENCY RESPONSE INFORMATION

FIRST AID PROCEDURES

Eye Contact

Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

Skin Contact

Wash affected skin areas thoroughly with soap and water.

FIRE FIGHTING INFORMATION

Unusual Hazards

Combustion generates toxic fumes of the following:
- sulfur oxides - nitrogen oxides

Extinguishing Agents

Use the following extinguishing media when fighting fires involving this material:
- carbon dioxide - dry chemical - water spray

CONTINUED

CONTINUATION

Personal Protective Equipment

Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

SPILL OR LEAK HANDLING INFORMATION

Personal Protection

Wear gloves made of the following material:
- butyl rubber
Additional personal protective equipment should include the following:
- safety glasses (ANSI Z87.1 or approved equivalent)

Procedures

Floor may be slippery; use care to avoid falling. Transfer spilled material to suitable containers for recovery or disposal.

HAZARD INFORMATION

HEALTH EFFECTS FROM OVEREXPOSURE

Eye Contact

Material can cause the following:
- irritation

Skin Contact

Prolonged or repeated skin contact can cause the following:
- slight skin irritation

FIRE AND EXPLOSIVE PROPERTIES

Flash Point	Not Applicable
Auto-ignition Temperature	500°C/932°F Estimate
Lower Explosive Limit	Not Applicable
Upper Explosive Limit	Not Applicable

REACTIVITY INFORMATION

Instability

This material is considered stable under specified conditions of storage, shipment and/or use. See **STORAGE AND HANDLING INFORMATION** Section for specified conditions. However, avoid temperatures above 200C/392F.

CONTINUED



CONTINUATION

Hazardous Decomposition Products

Thermal decomposition may yield the following:
- monomer vapors - sulfur oxides - alkylamines - oxides of nitrogen

Hazardous Polymerization

Product will not undergo polymerization.

Incompatibility

Avoid contact with strong oxidizing agents, particularly concentrated nitric acid.

ACCIDENT PREVENTION INFORMATION

COMPONENT EXPOSURE INFORMATION

Component Information

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Exposure Limit Information

Component No.	Units	ROHM AND HAAS		OSHA		ACGIH	
		TWA	STEL	TWA	STEL	TLV	STEL
1		None	None	None	None	None	None
2		None	None	None	None	None	None
3		None	None	None	None	None	None

PERSONAL PROTECTION MEASURES

Respiratory Protection

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None required under normal operating conditions.

Eye Protection

Use safety glasses (ANSI Z87.1 or approved equivalent).

CONTINUED

CONTINUATION
Hand Protection

Chemically resistant gloves should be worn whenever this material is handled. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

FACILITY CONTROL MEASURES

Ventilation

The ventilation system employed is dependent on the user's specific application of this material. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility.

STORAGE AND HANDLING INFORMATION

Storage Conditions

The minimum recommended storage temperature for this material is 0C/32F. The maximum recommended storage temperature for this material is 49C/120F. Avoid repeated freeze-thaw cycles; beads may fracture.

Handling Procedures

The maximum recommended operating temperature for this material is 60C/140F. Properly designed equipment is vital if these ion exchange 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. Do not pack column with dry ion exchange resins. Dry beads expand when wetted; this expansion can cause glass columns to shatter.

SUPPLEMENTAL INFORMATION

TYPICAL PHYSICAL PROPERTIES

State	Beads
pH	5-9 Aqueous slurry
Viscosity	Not Applicable
Specific Gravity (Water = 1)	1.1-1.3
Vapor Density (Air = 1)	< 1
Vapor Pressure	17 mm Hg @20°C/68°F Water
Melting Point	0°C/32°F Water

CONTINUED



CONTINUATION

Boiling Point	100°C/212°F	Water
Solubility in Water	Practically insoluble	
Percent Volatility	50-65 %	Water
Evaporation Rate (BAc = 1)	< 1	Water

TOXICITY INFORMATION

Acute Data

No toxicity data are available for this material.

WASTE DISPOSAL

Procedure

Unused resin may be incinerated or landfilled in facilities meeting local, state, and federal regulations. For contaminated resin, the user must determine the hazard and use an appropriate disposal method.

REGULATORY INFORMATION

WORKPLACE CLASSIFICATIONS

This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

This product is not a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

TRANSPORTATION CLASSIFICATIONS

US DOT Hazard Class NONREGULATED

EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW (SARA TITLE 3)

Section 311/312 Categorizations (40CFR 370)

This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

Section 313 Information (40CFR 372)

This product does not contain a chemical which is listed in Section 313 above de minimis concentrations.

CERCLA INFORMATION (40CFR 302.4)

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

RCRA INFORMATION

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

CHEMICAL CONTROL LAW STATUS

All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

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ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit
BAc = Butyl acetate
Bar denotes a revision from previous MSDS in this area.

The information contained herein relates only to the specific material identified. Rohm and Haas Company believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the accuracy, reliability, or completeness of the information. Rohm and Haas Company urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.