



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: C145

C147, C150, C155, C160 (Also in C, E, S, CL, DL, EP, FL, MB, PL, TL grade).

Manufacturer Name:

The Purolite Company
150 Monument Road
Bala Cynwyd, PA 19004, USA
Tel: +1 610 668 9090; Fax: +1 610 668 8139

Emergency Telephone:

(866) 387-7344
Non-toll free number: 760-602-8703

Supplier:

Purolite International Limited
Llantrisant Business Park
Llantrisant, Wales, UK CF72 8 L
Tel: +44 1443 229334; Fax: +44 1443 227073

Purolite Company Ltd.
Dongmenwai, Chengguan Town. Deqing Co.,
Huzhou City, Zhejiang 313216
Tel: +86 572 842 2908; Fax: +86 572 842 5345

Intended Use: Ion Exchange, Adsorbent, and / or Catalyst

Contact Person:
Ken Shaner, E-mail: kshaner@puroliteusa.com

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Solid (bead)

Color: Not applicable.

Odor: Not applicable.

Low hazard for usual industrial or commercial handling by trained personnel.

Potential Health Effects

Inhalation: Limited inhalation hazard at normal work temperatures.

Eye Contact: May cause temporary eye irritation.

Skin Contact: May be slightly irritating to skin.

Ingestion: Under normal conditions of intended use, this material does not pose a risk to health.

However, ingestion may cause irritation and malaise.

Chronic Health Effects: No other specific acute or chronic health impact noted.

Target Organ(s): | Eye | Skin.

Potential Physical / Chemical Effects: This product is not flammable.

OSHA Regulatory Status: This product is not hazardous according to OSHA 29CFR 1910.1200.

Environment: The environmental hazard of the product is considered to be limited.

3	COMPOSITION / INFORMATION ON INGREDIENTS
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General Information: The product contains: Polymer.

The components are not hazardous or are below required disclosure limits.

Chemical Name	CAS-No.	Concentration*
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated, sodium salts	69011-22-9	40 - 60%
Water	7732-18-5	45 - 55%

4	FIRST AID MEASURES
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Inhalation: No specific first aid measures noted.

Eye Contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if any discomfort continues.

Skin Contact: Wash skin with soap and water.

Ingestion: Immediately rinse mouth and drink plenty of water (200-300 ml). Large quantities: Get medical attention if irritation develops and persists.

5	FIRE-FIGHTING MEASURES
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Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable Extinguishing Media: Not applicable.

Special Fire Fighting Procedures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Unusual Fire & Explosion Hazards: None known.

Hazardous Combustion Products: Benzene compounds, Carbon Oxides, Styrene, Sulfur Oxides

Protective Measures: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

Flammability Class: NFPA Rating Fire = 1.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: In case of spills, beware of slippery floors and surfaces. See Section 8 of the MSDS for Personal Protective Equipment.

Spill Cleanup Methods: Sweep up spilled substance and remove to safe place. Do not discharge onto the ground or into water courses. Collect and dispose of spillage as indicated in section 13 of the MSDS.

7 HANDLING AND STORAGE

Handling: Avoid contact with eyes and prolonged skin contact. See Section 8 of the MSDS for Personal Protective Equipment. Observe good industrial hygiene practices.

Storage: Store at temperatures above 0°C. Store at temperature below 40°C. Keep in original container. Keep container tightly closed to prevent the loss of water. Store away from incompatible materials.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits: No exposure limits noted for ingredient(s).

Engineering Controls: Provide adequate ventilation.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: High-efficiency particulate respirator.

Eye Protection: Risk of contact: Wear approved safety goggles.

Hand Protection: Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

Skin Protection: Risk of contact: Use skin protection. It is a good industrial hygiene practice to minimize skin contact.

Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental Exposure Controls: Environmental manager must be informed of all major spillages.

9 PHYSICAL AND CHEMICAL PROPERTIES

Color: Not applicable.

Odor: Not applicable.

Odor Threshold: Not applicable.

Physical State: Solid (bead)
pH: Not applicable
Melting Point: Not applicable.
Freezing Point: Not applicable.
Boiling Point: Not applicable.
Flash Point: Not applicable.
Evaporation Rate: Not applicable.
Flammability Limit - Upper (%): Not applicable.
Flammability Limit - Lower (%): Not applicable.
Vapor Pressure: Not applicable.
Vapor Density (Air=1): Not applicable.
Specific Gravity: Not applicable.
Solubility in Water: Insoluble
Solubility (Other): Not applicable.
Partition Coefficient (n-Octanol/water): Not applicable.
Autoignition Temperature: Not applicable.
Decomposition Temperature: Not applicable.

10	STABILITY AND REACTIVITY
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Stability: Material is stable under normal conditions.

Conditions to Avoid: Avoid heat.

Incompatible Materials: Strong oxidizing agents. Nitric acid.

Hazardous Decomposition Products:

At Elevated Temperatures:	Benzene compounds, Carbon Oxides, Styrene, Sulfur Oxides
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Possibility of Hazardous Reactions: Will not occur.

11	TOXICOLOGICAL INFORMATION
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Listed Carcinogens: None.

Product Information

Acute Toxicity: No additional adverse health effects noted.

Chronic Toxicity: No data available.

12	ECOLOGICAL INFORMATION
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Ecotoxicity: No data available.

Mobility: The product is insoluble in water and will sediment in water systems.

Persistence and Degradability: The product is not readily biodegradable.

Bioaccumulation Potential: Potential to bioaccumulate is low.

Other Adverse Effects: No data available.

13 DISPOSAL CONSIDERATIONS

General Information: Dispose of waste and residues in accordance with local authority requirements.

Disposal Methods: No specific disposal method required.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14 TRANSPORT INFORMATION

DOT Not regulated.

TDG Not regulated.

IATA Not regulated.

IMDG Not regulated.

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: This is not a WHMIS controlled product.

Mexican Dangerous Statement: This product is not dangerous according to Mexican regulations.

Inventory Status

This product or all components are listed or exempt from listing on the following inventory: TSCA, DSL

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

Section 311/312 (40 CFR 370):

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372): Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA

TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.

TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E): Not regulated.

TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Not regulated.

Massachusetts Right-To-Know List: Not regulated.

Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)): Not regulated.

Minnesota Hazardous Substances List: Not regulated.

New Jersey Right-To-Know List: Not regulated.

Pennsylvania Right-To-Know List: Not regulated.

Rhode Island Right-To-Know List: Not regulated.

16	OTHER INFORMATION
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HAZARD RATINGS

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	1	1	0	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	Flammability	Physical Hazard	Personal Protection
HMIS	1	1	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

Issue Date: 07-Dec-2007

Supersedes Date:

SDS No.: 001

Disclaimer: The information provided in this material safety data sheet is based on current knowledge

about the product and current legal requirements and standards. It relates specifically to health, safety and environmental requirements and standards, may not identify all hazards associated with the product or its uses or misuses, does not signify any warranty with regard to the properties of the product, and only applies when the product is used for the purposes indicated in section 1. This product is not sold as suitable for other purposes and such other usage may cause risks not mentioned in this material safety data sheet.