

MATERIAL SAFETY DATA SHEET

NUMBER 015 RESIN/COPOLYMER

SECTION I •

IDENTIFICATION

Company Name: Purolite International Limited
Emergency phone number: Tel: 01443 229334
(within the EEC)
Company Address: Cowbridge Road, Pontyclun
(within the EEC) Mid-Glamorgan, Wales CF7 8YL

Product Name: Purolite Ion Exchange Resin
Product Code: MB 400, MB 400 QR, MB 400 IND, MB 46, MB 392, MB 37, NRW 37, NRW 37Li, NRW 37Li⁷
Chemical Name: Polystyrene Sulphonic/Quarternary Ammonium Polystyrene
Ionic Form: Hydrogen/Hydroxide

SECTION II •

INFORMATION on INGREDIENTS

Composition	Approx WT%	CAS No.
Copolymer: Crosslinked Polystyrene		
Moisture Content:	See Section IX	
Residual Hazardous Substances: (classified in Annex 1 or having exposure limits)	None	

SECTION III •

RISK IDENTIFICATION

Health Risk: The main routes of exposure may be by accidental eye contact and skin contact. Slight to moderate eye irritation is expected. No skin irritation.
Environmental Risk: Being non volatile and insoluble there is no risk to the air and water compartment. Material expected stable in the ground. No biological degradation observed.

SECTION IV •

FIRST AID MEASURES

Eye Contact: Flush eye with water for at least 15 minutes and remove all particles. Consult a physician if irritation persists.
Skin Contact: Remove the particles and wash with water.
Inhalation: If particles are inhaled, consult a physician.
Ingestion: Give 2 glasses of water to drink. However, never give anything to drink to a patient when unconscious.

SECTION V •

FIRE FIGHTING METHODS

Extinguishing Media: Foam. CO₂, Dry Chemical
Combustion Products: Combustion products may include monomers, residual organics, carbon oxides + amines, nitrogen oxides and sulphur oxides. See Section X.
Fire Fighting Procedures: Wear self-contained breathing apparatus and full protective gear.

SECTION VI •

ACCIDENTAL RELEASE MEASURES

Personal Protection: Floor may be slippery, take care to avoid falls.
Method for Cleaning-up: Sweep-up and transfer to containers for recovery or disposal, as in Section XIII.

SECTION VII •

STORAGE AND HANDLING

Storage Conditions: Store between 0°C and 50°C. Avoid freezing. Avoid dehydration (when rewetted the resin volume may increase and cause a rupture of the packaging).
Handling Conditions: Static discharges may accumulate on dry beads.

SECTION VIII •

EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Control: Normal ventilation is sufficient to control exposure.
Personal Protection: Respiratory protection is not required for normal operation. Protective gloves are recommended. Eye protection (safety glasses) are recommended as well as an eyewash facility.

PUROLITE
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SECTION IX •**PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Spherical beads	% Moisture content:	44-58
Colour:	Beige/Light brown	Specific Gravity:	1.08-1.29
Odour:	Slight Amine	Solubility in water (g/cc):	Virtually insoluble
Boiling Point, °C:	Not applicable.	Autoignition temperature:	> 500°C
Freezing Point, °C:	Not applicable.		

SECTION X •**STABILITY AND REACTIVITY**

Chemical Stability: (conditions to avoid)	Material is stable under normal conditions of use. Anion exchangers may give off vapors of amines at >50°C.
Incompatibility: (materials to avoid)	Avoid contact with nitric acid and strong oxidisers. Risk of explosion.
Decomposition Products:	Combustion products may include monomers, residual organics, carbon oxides + amines, nitrogen oxides, or sulphur oxide. Dried resins start to burn at 230°C.

SECTION XI •**TOXICOLOGICAL INFORMATION**

Acute Oral LD50 (rat):	>5000 mg/kg.
Acute Dermal (rabbit):	Not applicable.
Acute Vapour Inhalation: (rat LC50-4hr-23°C)	Not applicable.
Eye Irritation (rabbit):	Irritant by mechanical action, and also by chemical action.
Skin Irritation (rabbit):	Not Irritant.
Ingestion:	No hazards anticipated if material has not exchanged hazardous substances.

SECTION XII •**ECOTOXICOLOGICAL INFORMATION**

No biodegradation observed	WGK: 1
Low ecotoxicity because not soluble in water	

SECTION XIII •**DISPOSAL CONSIDERATION**

The material as supplied is not classified as hazardous waste and can be disposed off by landfill or usual methods for plastics according to local state and national regulations. Controlled incineration is possible (See Section X).
 FRG: Abfallnummernschlüssel: 57124 resins from water and foodstuff treatment.
 FRG: Abfallnummernschlüssel: 57125 resins with specific contaminants from chemical processes, metal industry and effluents treatment.

SECTION XIV •**TRANSPORT INFORMATION**

Name: See Section I	Code: See Section I	Transport: Not classified
Contains: Ion Exchange Resins		

SECTION XV •**REGULARITY INFORMATION**

Labelling: Xi - IRRITANT - R36, S26-39.
Note: Industrial grade products are not intended for use in analytical and medical applications without extensive purification.

Issued on: April 1999

Approved by: The Health and Safety Manager

Supersedes: All previous Material Safety Data Sheets

SALES OFFICES & BUSINESS CENTRES: **U.S.A.** The Purolite Company, 150 Monument Road, Bala Cynwyd, Philadelphia PA 19004. Telephone: (1) 610-668-9090, Toll Free: 800-343-1500, Telex: 291718, Telefax: (1) 610-668-8139. **Texas:** The Purolite Company, 1700 West Loop South, Suite 740, Houston, TX 77027. Toll Free: 800-562-6488, Telefax: (1) 713-627-7890. **California:** The Purolite Company, 22632 Golden Springs Drive, Suite 190, Diamond Bar, CA 91765. Telephone: (1) 909-396-5253, Telefax: (1) 909-396-5258. • **MEXICO** Purolite International, S.A. De C.V., World Trade Center, Montecito 38 Piso 33-19, Mexico City, D.F. 03810. Telephone: (52) 5-488-0905, Telefax: (52) 5-488-090. • **CANADA** The Purolite Company, 625 Wabanaki Drive, Unit #2, Kitchener, Ontario N2C 2G3. Telephone: (1) 519-896-6674, Toll Free: (1) 800-461-1500, Telefax: (1) 519-896-667. • **UNITED KINGDOM** Purolite International Limited, Kershaw House, Great West Road, Junction with Lampton Road, Hounslow, TW5 0BU. Sales - Telephone: (44) 181-570-4454, Telefax: (44) 181-572-7726. **European Marketing** - Telephone (44) 181-577-1222, Telefax: (44) 181-577-1136. • **GERMANY** Purolite Deutschland GmbH, Harkortstrasse 25, 40880 Ratingen. Telephone: (49) 2102-46033, Telefax: (49) 2102-443663. • **FRANCE** Purolite International SARL, 34 Avenue Malignon, 75008 Paris. Telephone: (33) 1-42-564563, Telex: 648856, Telefax: (33) 1-45-633826. • **BELGIUM** Purolite Benelux, Industrierweg 11 - Zinkval, 2630 Aartselaar (Antwerp). Telephone: (32) 3 -870-7298, Telefax: (32) 3-870-7299. • **SPAIN** Purolite Iberica S.A., Parc Tecnologic del Valles, Centre, Empreses Noves Tecnologies, 08290 Cerdanyola del Valles (Barcelona). Telephone: (34) 93-582-0266, Telefax: (34) 93-582-0268. • **EGYPT** Purolite International Middle East, LCC, 12 Obour Gardens, 5th Floor, App. No. 55, Saleh Salem Street, Nasr City, Cairo. Telephone: (20) 2-4031969, Telefax: (20) 2-4021478. • **SWEDEN** Purolite Nordiska AG, Höjdroergatan 5, 21 239 Malmö. Telephone: (46) 40-292130, Telefax: (46) 40-292232. • **ITALY** Purolite International S.r.l., Viale Coni Zugna 29, 20144 Milan. Telephone: (39) 02-481-8145 Telefax: (39) 02-4801-2359. • **ROMANIA** Purolite Romania, International Business Centre 'Modern', 34-36 Carol I Blvd, 5th Floor, Bucharest. Telephone: (40) 1-250-5053/5028 Telefax: (40) 1-250-5999. • **POLAND** Radus Spolka z o.o., ul. Przebendowskich 33, 81-543 Gdynia. Telephone: (48) 58-6248979/58-6649609/58-6649617, Telefax: (48) 58-6248118. • **CZECH & SLOVAK REPUBLICS** Purolite International, Nad Mazankou 17, 182 00 Prague 8. Telephone & Telefax: (420) 2-6881086/2-90010330. • **RUSSIA** Moscow - Head Office: Purolite International, 10th Floor, 36 Lyusinovskaya Street, Moscow 113093. Telephone: (7) 502-222120 (satellite)/ (7) 095-5648120 Telefax: (7) 502-222121 (satellite)/ (7) 095-5648121, (7) 095-7455047. **St. Petersburg:** Purolite International Limited, 12A Tabovskaya St, St. Petersburg, 192007. Telephone: (7) 812-3278530, Telefax: (7) 812-3279079. • **UKRAINE** Purolite International Limited, 2 Korolenko Street, Dnepropetrovsk 320070. Telephone: (38) 0562-320065/66, Telefax: (38) 0562-320067. • **KAZAKHSTAN** Purolite RH Limited, Office 25, 157 Abaya ave., Almaty, 480009. Telephone (7) 3272-608-449, Telefax: (7) 3272-509-475. • **CHINA** Purolite (China) Limited, Chenguan County, Dequin City, Xhejiang Province, 313200. Telephone: (86) 572-8422908/8422819, Telefax: (86) 572-8423954. • **SINGAPORE** Purolite International (Singapore) PTE Limited, 32-04 The Concourse, 300 Beach Road, 199555. Telephone: (65) 297-0889/297-1453, Telefax: (65) 297-1986. • **TAIWAN** Purolite International, 16F-2, No. 191, Fu-hsing N. Road, Taipei. Telephone (886) 2-546-7078, Telefax: (886) 2-546-7069. • **KOREA** Purolite International (Korea) LLC, Dae Yeon Bldg., Suite 403, 943-30 Daechi-dong, Kangnam-gu, Seoul. Telephone: (82) 2-3453-7062/7063, Telefax: (82) 2-3453-7064

All suggestions and recommendations given concerning the use of Purolite products are based on tests and data believed to be reliable. However, as Purolite cannot control the use of its products by others, no guarantee is either expressed or implied by any such suggestion or recommendation by Purolite nor is any information contained in this data sheet to be construed as a recommendation to infringe any patent currently valid.

MATERIAL SAFETY DATA SHEET

NUMBER 015a RESIN/COPOLYMER

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