

SAFETY DATA SHEET

1.	Section 1. Identification of the substance/mixture and of the company/undertaking							
1.1.	Product Identifier:							
	Trade name or designati	on of mixture:	Purolite [®] C100E					
	EC Number:	Not applicable.						
	Registration Number:	This mixture is exempted from Registration according to the provisions of Title II and VI and Article 2(9) of REACH.						
1.2.	Relevant identified uses	t identified uses of the substance or mixture and uses advised against						
	Identified uses:	Ion Exchange, Adsorbent, and/or Catalyst						
	Uses advised against:	None Known.						
1.3.	Details of the supplier of	of the supplier of the safety data sheet						
	Supplier:	Purolite Ltd. Llantrisant Business Park, Llantrisant, Wales, UK CF72 8LF						
		Tel:+44 1443 229334 Fax:+44 1443 227073						
	Manufacturer:	Purolite S.R.L. Str.Aleea Uzinei nr.11, 505700 Victoria, Judetul Brasov, Romania	Purolite 150 Monument Road Bala Cynwyd, PA 19004 USA					
		Tel:+40 2682 43004 Fax:+40 2682 43002	Tel:+1 610 668 9090 Fax:+1 610 668 8139					
		Purolite (China) Co. Limited Qianlong Economic Development Zone, Qianyuan Town, Deqing County, Huzhou City, Zhejiang, China 313216						
		Tel:+86 572 8422908 Fax:+86 572 8425345						
	Contact Person:	Ken Shaner						
	Email:	msds@purolite.com						
1.4.	Emergency Telephone Number:	+1 866 387 7344 +1 760 602 8703						

2.	Section 2. Hazards	s identifica	ation							
2.1	Classification of the substance or mixture									
	Classification according to Directive 67/548/EEC or 1999/45/EC as amended:			This preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.						
2.1.1	Classification according to Regulation (EC) No 1272/2008 as amended									
	Hazard summary									
	Physical hazards			Not classified for physical hazards.						
	Health hazards Environmental hazards Specific hazards Main symptoms			Not classified for health hazards. Not classified for hazards of the environment. Direct contact with eyses may cause temporary irritation.						
				Under normal conditions of intended use, this material does not pose a risk to health.						
2.2	Label elements									
	Label according to Regulation (EC) No. 1272/2008 as amended									
	Hazard statements			The mixture does not meet the criteria for classification.						
	Precautionary Statements									
	Prevention		Use personal protective equipment as required.							
	Response			Get medical advice/attention if you feel unwell.						
Storage			Store away from incompatible materials.							
	Disposal			Dispose of contents/container in accordance with local/regional/national/international regulations.						
	Supplemental label information			None.						
2.3	Other hazards			Not assigned.						
3.	Section 3. Comp	osition/in	formation on ingr	edients						
3.1	Substance	Not applicable								
3.2	Mixture General Inform:									
3.2.2	Chemical name	%	CAS No. / EC N	0.	REACH Registration No.	Index No.	Notes			
	Sodium polystyrene sulphonate	40 - 65	69011-22-9		-	-	-			
	Classification:	DSD:	-							
		CLP:	-							
	Water	35 - 60	7732-18-5 231-791-2		-	-	-			
	Classification:	DSD:	-							

CLP:

DSD: Directive 67/548/EEC. CLP: Regulation No. 1272/2008.

Composition comments The full text for all R- and H-phrases is displayed in section 16. All oncentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. Section 4. First aid measures

General Information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1 Description of first aid measures

4.1.1 Inhalation

-Move into fresh air and keep at rest. Get medical attention if any discomfort continues.

4.1.2 Skin contact

-Wash off immediately with soap and plenty of water. If irritation persists get medical attention.

4.1.3 Eye contact

-Flush thoroughly with water for at least 15 minutes. Get medical attention if irritation develops and persists.

4.1.4 Ingestion

-Rinse mouth thoroughly. Never give liquid to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention if any discomfort continues.

4.2 Most important symtoms and effects, both acute and delayed -Under normal conditions of intended use, this material does not pose a risk to health.

4.3 Indication of any immediate medical attention and special treatment -Treat symptomatically

5. Section 5. Fire-fighting measures

General fire hazards -The product is not flammable.

5.1 Extinguishing media

-Suitable extinguishing media

-Extnguishing with foam, carbon dioxide, dry powder or water fog.

-Unsuitable extinguishing media

-None known.

5.2 Special hazards arising from the substance or mixture -By heating and fire, harmful vapors/gases may be formed.

5.3 Advice for fire fighters

-Special protective equipment for fire fighters

-Wear self-contained breathing apparatus and protective clothing.

-Special fire fighting procedures

-In the event of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so

without risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 -For non-emergency personnel

-Avoid contact with skin and eyes. For personal protection, see section 8 of the SDS.

6.1.2 -For emergency responders

-Keep unnecessary personnel away. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 Environmental precautions

-Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

-Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and dispose of spillage as indicated in section 13 of the SDS.

6.4 **Reference to other sections**

-For personal protection, see section 8 of the SDS. For waste disposal, see Section 13 of the SDS.

7. Section 7. Handling and storage

7.1 Precautions for safe handling

-Use with adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Observe good industrial hygiene practices.

7.2 **Precautions for safe storage**

-Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

-Ion exchange, adsorbent or catalyst

8. Section 8. Exposure controls/personal protection

8.1 Control parameters

8.1.1 -Occupational exposure limits

-No exposure limits noted for ingredient(s).

8.1.2 **Recommended monitoring procedures**

-Follow standard monitoring procedures.

8.1.4 DNEL

-Not available.

PNEC

-Not available.

8.2 Exposure controls

8.2.1 - Appropriate engineering controls

-Provide adequate ventilation.

8.2.2 -Individual protection measures, such as personal protective equipment

-General information

-Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

-Eye/face protection

-If contact is likely, safety glasses with side shields is recommended.

-Skin protection

-Hand protection

-Protective gloves should be worn to prevent skin contact. Suitable gloves can be recommended by the glove supplier.

-Other

-Wear appropriate clothing to prevent repeated or prolonged skin contact.

-Respiratory protection

-No personal respiratory protective equipment is normally required.

-Thermal hazards

-None known.

-Hygiene measures

-Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothingand protective equipment to remove contaminants.

8.2.3 Environmental exposure controls

-Environmental manager must be informed of all major spillages.

9. Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Beads

Physical state: Solid
Form: Bead
Colour: Gold, amber, light brown, dark brown, black, green
Odour: Odourless
Odour threshold: Not available.
pH: Neutral
Melting point/freezing point: Not available.
Boiling point, initial boiling point, and boiling range: Not available.
Flash point: Not applicable.
Auto-ignition temperature: Not applicable.
Flammability (solid,gas): Not available.
Flammability limit-lower (%): Not available.
Flammability limit-upper (%): Not available.

Explosive properties: Not applicable.
Explosive limit: Not applicable.
Vapour pressure: Like water
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Relative density: 1.15 - 1.20
Solubility (water): Insoluble in water and organic solvents
Partition coefficient n-octanol/water: No data available.
Decomposition temperature: Not available.
Viscosity: Not available.
Percent volatile: Not available.

9.2 Other Information

-No relevant additional infromation available.

10. Section 10. Stability and reactivity

10.1 Reactivity

-The product is stable and non reactive under normal conditions of use, storage and transport.

10.2 Chemical Stability

-Material is stable under normal conditions.

10.3 Posibility of hazardous reactions

-No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

-Heat, sparks, flames elevated temperatures.

10.5 Incompatible materials

-Strong oxidising agents. Nitric acid.

10.6 Hazardous decomposition products

-Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Section 11. Toxicological information

General Inforamtion

-Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure:

-Ingestion

-May cause discomfort if swallowed.

-Inhalation

-Inhalation of dusts may cause respiratory irritation.

-Skin contact

-May cause mild skin irritation.

-Eye contact

-May cause eye irritation on direct contact.

-Symptoms

-Irritation of eyes and mucous membranes. Irritation of nose and throat.

11.1 Information on toxicological effects

11.1.1 Not applicable.

11.1.2 Mixture

Acute toxicity

-May cause discomfort if swallowed.

Skin corrsion/irritation

-Prolonged skin contact may cause temporary irritation.

Serious eye dmage/eye irritation

-Direct contact with eyes and mucous membranes. Irritation of nose and throat.

Respiratory sensitization

-Not classified.

Skin sensitization

-Not classified.

Germ cell mutagenicity

-Not classified.

Carcinogenicity

-Not classified.

Reproductivity toxicity

-Not classified.

Specific target organ toxicity - single exposure

-Inhalation of dust may cause respiratory irritation. **Specific target organ toxicity - repeated exposure** -Not classified.

Aspiration hazard

-Not classified. **Mixture versus substance information** -Not available. **Other information**

-Not available.

12. Section 12. Ecological information

12.1 Toxicity

-No toxicity data noted for the ingredient(s)

12.2 Persistence and degradability -No data available.

12.3 Bioaccumulative potential -No data available.

Mobility

-No data available.

Environmental fate - Partition coefficient

-No data available.

12.4 Mobility in soil

-No data avaialble.

12.5 Results of PBT and vPvB assessment

-Not a PBT or vPvB substance or mixture.

12.6 Other adverse effects

-The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Section 13. Disposal considerations

13.1 Waste treatment methods

Residual waste

-Dispose of in accordance with local regulations.

Contaminated packaging

-Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code

-Waste codes should be assigned by the user based on the application for which the product ws used.

Disposal methods/information

-Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/containers in accordance with local/regional/national/international regulations.

14. Section 14. Transport information

14.1 ADR

-The product is not covered by international regulation on the transport of dangerous goods.

14.2 RID

-The product is not covered by international regulation on the transport of dangerous goods.

14.3 ADN

-The product is not covered by international regulation on the transport of dangerous goods.

14.4 IATA

-The product is not covered by international regulation on the transport of dangerous goods.

14.5 IMDG

-The product is not covered by international regulation on the transport of dangerous goods.

14.6 Tranpsort in Bulk according to AnnexII of MARPOL 73/78 and the IBC Code -No information available.

15. Section 15: Regulatory information

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

-Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I: -Not listed.

- -Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II: -Not listed.
- -Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I: -Not listed.
- -Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1: -Not listed.

- -Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2: -Not listed.
- -Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3: -Not listed.
- -Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V: -Not listed.
- -Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registery (EPER):

-Not listed.

-Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List: -Not listed.

Other regulations

-This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

National regulations

-Follow national regulation for work with chemical agents.

15.2 Chemical safety assessment

-No Chemical Safety Assessment has been caried out.

16. Section 16. Other information:

List of abbreviations:

-DNEL: Derived No-Effect Level.
-PNEC: Predicted No-Effect Concentration.
-PBT: Persistent, bioaccumulative and toxic.
-vPvB: Very Persistent and very Bioaccumulative.

References:

-Not available.

Information on evaluation method leading to the classification of mixture:

-The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-phrases under Sections 2 to 15:

-None.

Training information:

-Follow training instructions when handling this material.

Further information:

-This mixture is exempted from Registration according to the provisions of Title II and VI and Article 2(9) of REACH.

Disclaimer:

-The information provided in this 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 safety data sheet.

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