# SAFETY DATA SHEET



# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation

Purolite® A400

of the mixture

Registration number

Synonyms None.

**Issue date** 06-January-2012

Version number 02

Revision date 29-July-2016 Supersedes date 29-July-2012

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Ion Exchange, Absorbent and/or Catalyst

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

**Supplier** Purolite Ltd.

Llantrist Business Park

Llantrisant, Wales, UK CF72 8LF

**Telephone** +44 1443 229334 **Fax** +44 1443 227073

Manufacturer Purolite

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Bala Cynwyd, PA 19004 USA

**Telephone** +1 610 668 9090 **Fax** +1 610 668 8139

Purolite S.R.L.

Str. Aleea Uzinei nr.11,

505700 Victoria Judetul Brasov Romania

**Telephone** +40 26 824 3001 **Fax** +40 26 824 3002

Purolite (China) Co. Limited,

Qianlong Economic Development Zone,

Qianyuan Town, Deqing County,

Huzhou City, Zhejiang, China 313216

**Telephone** +86 572 842 2908 **Fax** +86 572 842 5345

Contact person SDS Coordinator e-mail sds@purolite.com

1.4. Emergency telephone

number

+1 866 387 7344

+1 760 602 8703

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

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905474 Version #: 02 Revision date: 29-July-2016 Issue date: 06-January-2012

**Hazard summary** Exposure to powder or dusts may be irritating to eyes, nose and throat.

#### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word None.

**Hazard statements** The mixture does not meet the criteria for classification.

**Precautionary statements** 

Prevention

P281 Use personal protective equipment as required.

Response

P314 Get medical advice/attention if you feel unwell.

Storage Not assigned.

**Disposal** 

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

**2.3. Other hazards** Not a PBT or vPvB substance or mixture.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **General information**

| Chemical name  | %       | CAS-No. / EC<br>No. | REACH Registration No. | INDEX No. | Notes |
|--|---------|---------------------|------------------------|-----------|-------|
| Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized | 20 - 60 | 69011-19-4<br>-     | -                      | -         |       |
| Classification: -  |         |                     |                        |           |       |
| Water  | 40 - 80 | 7732-18-5           | -                      | -         |       |
|  |         | 231-791-2           |                        |           |       |
| Classification: -  |         |                     |                        |           |       |

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance.

**Composition comments** 

The full text for all H-statements is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### **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

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

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

**Eye contact** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

If eye irritation persists, get medical advice/attention.

**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 symptoms

and effects, both acute and delayed

Eye contact: Contact may cause irritation with redness, tearing, pain, and/or blurred vision.

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

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### **SECTION 5: Firefighting measures**

General fire hazards The product is not flammable. Thermal decomposition or combustion may liberate carbon oxides

and other toxic gases or vapours.

5.1. Extinguishing media

Suitable extinguishing

media

Extinguish 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 vapours/gases may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters 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.

### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Avoid contact with skin and eyes.

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.

Avoid the generation of dusts during clean-up.

6.3. Methods and material for containment and cleaning up

Large Spills: Dike the spilled material, where this is possible. Sweep or shovel up material and place in a clearly labeled container for waste. For waste disposal, see section 13 of the SDS.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Never return spills to original containers for re-use.

6.4. Reference to other sections

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

# **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Wear protective clothing as described in Section 8 of this safety data sheet. Observe good industrial hygiene practices. Use with adequate ventilation. Wash thoroughly after handling. Avoid

release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s) Ion Exchange, Absorbent and/or Catalyst

#### **SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

No exposure limits noted for ingredient(s). Occupational exposure limits

**Biological limit values** 

No biological exposure limits noted for the ingredient(s). Follow standard monitoring procedures.

**Recommended monitoring** 

procedures

Not available.

Derived no effect levels (DNELs) Predicted no effect

Not available.

concentrations (PNECs) **Exposure guidelines** 

This material does not have established exposure limits.

8.2. Exposure controls

Appropriate engineering

Provide adequate ventilation. Provide eyewash station.

controls

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.

Purolite® A400 SDS UK **Eye/face protection** If contact is likely, safety glasses with side shields are recommended.

Skin protection

- Hand protection Protective gloves should be worn to prevent skin contact.

SPECIFIC RECOMMENDATIONS.

Breakthrough time: > 10 min (EN 374-3 Class 1).

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 normally required.

Thermal hazards None known.

**Hygiene measures**Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practices.

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.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Appearance Beads.
Physical state Solid.
Form Beads.

Colour White. Yellow. Pale amber. Cream.

Odour Odourless.
Odour threshold Not available.
pH Neutral.
Melting point/freezing point Not available.
Initial boiling point and boiling Not available.

range

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Non flammable.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Vapour pressureNot applicable.Vapour densityNot available.Relative density1.04 - 1.12Solubility(ies)None.

Partition coefficient No data available.

(n-octanol/water)

Auto-ignition temperatureNot applicable.Decomposition temperatureNot available.ViscosityNot available.Explosive propertiesNot explosive.Oxidising propertiesNot oxidising.

**9.2. Other information** No relevant additional information available.

#### **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. Possibility of hazardous

decomposition products

reactions

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid**Contact with incompatible materials. Heat, sparks, flames, elevated temperatures.

**10.5. Incompatible materials** Strong oxidising agents. Nitric acid.

**10.6. Hazardous** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours.

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### **SECTION 11: Toxicological information**

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Inhalation of dusts may cause respiratory irritation.

May cause mild skin irritation. Skin contact

May cause eye irritation on direct contact. Eye contact

May cause discomfort if swallowed. Ingestion

Dusts may irritate the respiratory tract, skin and eyes. **Symptoms** 

11.1. Information on toxicological effects

May cause discomfort if swallowed. Acute toxicity

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

May cause eye irritation on direct contact.

Respiratory sensitisation Not classified. Skin sensitisation Not classified. Germ cell mutagenicity Not classified. Carcinogenicity Not classified. Reproductive toxicity Not classified. Specific target organ toxicity -Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** Not classified. Mixture versus substance

information

Not available.

Other information Not available.

### **SECTION 12: Ecological information**

The product components are not classified as environmentally hazardous. However, this does not 12.1. Toxicity

exclude the possibility that large or frequent spills can have a harmful or damaging effect on the

environment.

12.2. Persistence and

degradability

No data available.

No data available. 12.3. Bioaccumulative potential **Partition coefficient** No data available.

n-octanol/water (log Kow)

**Bioconcentration factor (BCF)** Not available. No data available.

12.4. Mobility in soil No data available. Mobility in general

12.5. Results of PBT

and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. 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 was

**Disposal methods/information** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

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### **SECTION 14: Transport information**

**ADR** 

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

**ADN** 

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

**IMDG** 

14.1. - 14.6.: Not regulated as dangerous goods.14.7. Transport in bulk Not applicable.

according to Annex II of Marpol

and the IBC Code

### **SECTION 15: Regulatory information**

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

#### **EU** regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

#### Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended Not listed.

### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

### Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The

product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation)

as amended and respective national laws implementing EC directives.

National regulations Follow national regulation for work with chemical agents.

15.2. Chemical safety No Chemical Safety Assessment has been carried out.

assessment

#### **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.

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ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

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

Full text of any H-statements

None.

not written out in full under Sections 2 to 15

Follow training instructions when handling this material.

**Training information 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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