Safety Data Sheet

| Product name: |
|---------------|
| Sofnofil |

Safety Data Ref: 22 Initial issue date: 07 October 2014 Revision date: 01 June 2015 Version number: 11



| 1 | IDENTIFICATION O | IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY | | |
|-----|------------------------------|---|--|--|
| 1.1 | Product identifier | Sofnofil (impregnated activated alumina) | | |
| 1.2 | Relevant use(s)/misuse(s) | An odour absorbent for industrial air purification (e.g. in paper mills, sewage treatment) | | |
| 1.3 | SDS supplier | Molecular Products Ltd, Parkway, Harlow Business Park, Harlow, Essex, CM19 5FR, UK | | |
| 1.4 | Emergency contact | +44 (0) 1279 445111 (office hours) / +44 (0)1865 407333 (24 hour emergency number, English speaking) trevor@rising-hsande.co.uk (competent person email) | | |
| | Emergency contact (other) | China +86 512 8090 3042, China (NRCC): +86 532 8388 9090, Mexico: +52 555 004 8763, Chile: +56 225 829 336, Brazil: +55 11 3197 5891 | | |

| 2 | HAZARDS IDENTIFICATION | | | | |
|-------|---|-----------------------|----------------|-------------|------|
| 2.1 | Classification of the substance or mixture | | | | |
| 2.1.1 | Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) | | Not classified | | |
| 2.1.2 | See section 16 for full text of H statements | | | | |
| 2.2 | Labelling elements | | | | |
| 2.2.1 | Labelling in accordance with EC Regulation No 1272/2008 (CLP/GHS) | | | | |
| | Pictogram | | None | Signal word | None |
| | Hazard statements | None | | | |
| | Precautionary statements | None | | | |
| 2.3 | Other hazards | | | | |
| | Dust may cause irr | itation of skin and e | eyes | | |

| 3 | COMPOSITION / INFORMATION ON INGREDIENTS | | | | | |
|---|--|--------------|---------------|--|---------------|--|
| | Chemical characterisation | acterisation | | | | |
| | Chemical name | CAS-No | EINECS/ELINCS | Classification | Concentration | |
| | Aluminium oxide | 344-28-1 | 215-619-6 | Not classified | > 80% | |
| | Potassium permanganate | 7722-64-7 | 231-760-3 | CLP: Ox. Sol. 2 H272; Acute Tox. 4 H302; Aquatic Acute I H400; Aquatic Chronic I H410 (see section 16) | < 6% | |

| 4 | FIRST AID MEASURES | FIRST AID MEASURES | | |
|-----|---|--------------------|--|--|
| 4.1 | Description of measures | | | |
| | Inhalation Remove casualty to fresh air and provide warmth and rest | | | |
| | Skin contact Clean areas of skin affected with soap and plenty of water. If necessary, seek medical advice | | | |
| | Eye contact Wash out eye thoroughly with plenty of water until irritation subsides; if necessary, consult an specialist/ophthalmologist | | | |
| | Ingestion If product is swallowed, do not induce vomiting. Drink plenty of water and, if necessary, seek medical a | | | |
| 4.2 | Most important effects/symptoms | None known | | |
| 4.3 | Immediate/special treatment Treatment as described above | | | |

| 5 | FIRE FIGHTING MEASURES | |
|-----|--------------------------|---|
| 5.1 | Extinguishing media | To suit local surroundings (e.g. chemical powder, carbon dioxide, dry sand, water) |
| 5.2 | Special hazards | Product is not flammable. No hazards except low volumes of oxygen may be released in a fire |
| 5.3 | Advice for fire fighters | Self-contained breathing apparatus may be required |

| 6 | ACCIDENTAL RELEASE MEASURES | | |
|-----|--|--|--|
| 6.1 | Personal precautions Adhere to personal protective measures. Avoid inhalation of dust | | |
| 6.2 | Environmental precautions Do not allow to get into waste water or waterways; if this occurs, inform the relevant water authority at once | | |
| 6.3 | Methods and materials for cleaning up | | |
| 6.4 | Reference to other sections See section 8 for personal protective equipment | | |

| 7 | HANDLING AND STORAGE | |
|-----|-------------------------------|--|
| 7.1 | Precautions for safe handling | Handle in accordance with good hygiene and safety practice. Avoid the raising and deposition of dust |
| 7.2 | Conditions for safe storage | Ensure adequate ventilation of the storage area. Keep containers tightly closed, at temperatures < 190°C and dry |
| 7.3 | Specific end use(s) | An odour absorbent for industrial air purification |

| 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION | | | | |
|-----|--|--|---|---|--|
| 8.1 | Workplace Exposure Limits (WELs) have been assigned by the HSE (EH40/2011) | | | | |
| | LTEL (8 hour TWA) | | 10 mg/m ³ | | Data for inhalable aluminium oxide dust |
| | LTEL (8 hour TWA) | | 4 mg/m [£] | | Data for respirable aluminium oxide dust |
| 8.2 | Exposure controls | | | · | |
| | Engineering controls | Provide adeq | Provide adequate ventilation (e.g. local exhaust ventilation) | | |
| | Personal protection | Observe normal standards for handling chemicals Wash hands before breaks and after work Avoid inhalation of dust if raised Wear personal protective equipment appropriate to the task (see below) | | | (see below) |
| | Eye protection | , , , , | es if risk of eye contamination | | |
| | Skin protection | | Suitable rubber gloves (consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken) Approved dust mask for dust if ventilation is insufficient | | |
| | Respiratory protection | Approved du | | | |
| | Other protection | Protective ov | veralls | | |

| 9 | PHYSICAL AND CHEMICAL PROPERTIES | | | |
|-----|---|---|-----------------------------------|--------------------------|
| 9.1 | Basic physical and chemical properties | | | |
| | Physical form | Physical form Solid | | Purple (brown after use) |
| | Odour Odourless Boiling pt/range Not determined | | pН | Not determined |
| | | | Melting pt/range | Not determined |
| | Flash point | Not applicable | Relative density | 3.3 g/cm ³ |
| | Water solubility | Slight. Potassium permanganate will leach out to give purple/brown colour | Odour threshold | Not applicable |
| | Evaporation rate Not applicable | | Flammability | Not applicable |
| | Explosion limits | Not applicable | Vapour pressure | Not applicable |
| | Vapour density | Not applicable | Partition coeff. LogPoct/water | Not applicable |
| | Auto-ignition temperature | Not applicable | Viscosity | Not applicable |
| | Explosive properties | Not determined | Oxidising properties | Not determined |
| | Decomposition temperature | Not determined | | |
| 9.2 | Other information | None known | | |

| 10 | STABILITY AND REACTIVITY | | |
|------|----------------------------------|---|--|
| 10.1 | Reactivity | None known | |
| 10.2 | Chemical stability | Stable under normal conditions of handling | |
| 10.3 | Hazardous reactions | Hazardous polymerisation will not occur | |
| 10.4 | Conditions to avoid | Contact with oxidisable material and temperatures > 190°C | |
| 10.5 | Incompatible material | Oxidisable materials | |
| 10.6 | Hazardous decomposition products | None | |

| Ш | TOXICOLOGICAL INFORMATION | | | | |
|------|--------------------------------------|---|------|--|--|
| 11.1 | Information on toxicological effects | | | | |
| | Acute toxicity | LD ₅₀ rat (oral) No data available | | | |
| | Dermal compatibility | No data available | | | |
| | Mucous membrane | No data available | | | |
| | Further information | None | None | | |

| 12 | ECOLOGICAL INFORMATION | | | | | |
|------|------------------------|------------------|--|---------------------------|----------------|-------------------|
| 12.1 | Toxicity | LC ₅₀ | Aquatic organisms | | mg/l | No data available |
| 12.2 | Degradability | Not determined | 12.3 | Bioaccumulative potential | Not determined | |
| 12.4 | Mobility in soil | Not determined | I 2.5 PBT/vPvB assessment Not applicable | | e | |
| 12.6 | Other adverse effects | None known | | | | |

| | 13 | DISPOSAL CONSIDERATIONS | | | | |
|--|----|-------------------------|--|--|--|--|
| | | Advice on disposal | If possible, recycle to supplier or approved recycling company. If not (e.g. designated as waste), dispose of in accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005 | | | |
| | | Contaminated packaging | Treat empty containers in the same way as the product. If possible wash out thoroughly and recycle | | | |

| 14 | TRANSPORT INFORMATION | | | | |
|------|--|--|------|---|----------------|
| 14.1 | United Nations number (ADR, IMDG, IATA) | Not classified | 14.2 | Proper shipping name (ADR, IMDG, IATA) | Not classified |
| 14.3 | Transport class(s) (ADR, IMDG, IATA) | Not classified | 14.4 | Packing group (ADR, IMDG, IATA) | Not classified |
| 14.5 | Environmental hazards (ADR, IMDG, IATA) | The product should not be marked as a marine pollutant | 14.6 | Special procedures (ADR, IMDG, IATA) | Not applicable |
| 14.7 | Transport in bulk | Not applicable | | | |

| 15 | REGULATORY INFORMATION | | | |
|----|----------------------------|--|--|--|
| | Classification & labelling | The SDS has been updated in accordance with EC Regulation No 1272/2008 (CLP/GHS) | | |

| 16 | OTHER INFORMA | HER INFORMATION | | | | | |
|----|---------------------|---|------|--|--|--|--|
| | Further information | The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP) Since the potassium permanganate is absorbed into the alumina and is not released, it does not contribute to the product classification | | | | | |
| | | Comply with COSHH Regulations | | | | | |
| | Hazard statements | ferred to in sections 2-15 | | | | | |
| | H272 | May intensify fire; oxidiser | H400 | Very toxic to aquatic life | | | |
| | H302 | Harmful if swallowed | H410 | Toxic to aquatic life with long lasting effects. | | | |
| | Sources of data | Other suppliers' safety data sheets, EH40 (2011) 01/06/2015 | | | | | |
| | Date of issue | | | | | | |
| | | nformation is based on our present state of knowledge and is intended to describe our products from the point of view of the safety ements. It should not be construed as guaranteeing specific problems | | | | | |