

Safety Data Sheet



Product name:

Sofnolime[®] RG

Safety Data Ref: 27

Initial issue date: 18 December 2014

Revision date: 01 October 2018

Version number: 10

Section 1 IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY

| | | |
|-------|-----------------------------|---|
| 1.1 | Product identifier | Soda Lime (Sofnolime RG) |
| 1.2 | Relevant use(s) / misuse(s) | As an absorbent for carbon dioxide and other acidic gases from industrial process streams. It is not suitable for use in breathing systems. |
| 1.3 | SDS supplier | Molecular Products Ltd, Parkway, Harlow Business Park, Harlow, Essex, CM19 5FR, UK |
| 1.4 | Emergency contact (global) | Office hours: +44 (0) 1279 445111 (09:00- 17:00, UK time) / +44 (0) 1865 407333 (out of hours) sds@molprod.com (email) |
| 1.4.1 | 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 |

Section 2 HAZARDS IDENTIFICATION

| | | | |
|-------|--|---|-----------------------|
| 2.1 | Classification of the substance or mixture (i.e. Sofnolime) | | |
| 2.1.1 | Classification according to Regulation (EC) No 1272/2008 (CLP/GHS) – see section 1.1 | | |
| | H314 | Skin Corr. 1B | |
| 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 | | Signal word DANGER |
| | Hazard statements | | |
| | H314 | Causes severe skin burns and eye damage | |
| | Precautionary statements | | |
| | P260 | Do not breathe dust/fume/gas/mist/vapours/spray | |
| | P264 | Wash hands thoroughly after handling | |
| | P280 | Wear protective gloves/protective clothing/eye protection/face protection | |
| | P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower | |
| | P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing | |
| | P310 | Immediately call a POISON CENTER or doctor / physician | |
| 2.3 | Other hazards | | |
| | None known | | |

Section 3 COMPOSITION / INFORMATION ON INGREDIENTS

| | | | | |
|---------------------------|--|---------------|---|---------------|
| Chemical characterisation | Solid bases plus additives – see section 16 The CLP classifications required in this section are related to that of the product supplied. To comply with the legislation the classification of the relevant ingredients of the product, as if they were present at 100%, must be outlined. Where ingredients are present in the product at very low concentrations the level of risk to the user is reduced, hence the reason that the classifications for the individual components and the product are different. NOTE: The classification of calcium hydroxide is that of a powdered/granular form. In Sofnolime it is contained in a pellet and the probability of inhalation is negligible. Therefore, the classification of H335, STOT SE 3 which is applied to the powder/granular form of calcium hydroxide does not appear for Sofnolime. | | | |
| Chemical name | CAS-No | EINECS/ELINCS | Classification | Concentration |
| Calcium Hydroxide | 1305-62-0 | 215-137-3 | Skin Irrit. 2 H315 Eye Damage 1 H318 STOT SE 3 H335 WEL assigned | >75% |
| Sodium Hydroxide | 1310-73-2 | 215-185-5 | Skin Corr. 1; H314 | <4% |

| Section 4 | | FIRST AID MEASURES |
|-----------|---------------------------------|--|
| 4.1 | Description of measures | |
| | Inhalation | Remove casualty to fresh air and provide warmth and rest. Seek medical attention |
| | Skin contact | Clean areas of skin affected immediately with soap and plenty of water. Seek medical advice |
| | Eye contact | Immediately wash out eye thoroughly with plenty of water until irritation subsides; consult an eye specialist/ophthalmologist |
| | Ingestion | Unlikely route of exposure. But if product is swallowed, do not induce vomiting. Drink plenty of water and seek medical advice |
| 4.2 | Most important effects/symptoms | If skin irritation occurs after washing, seek medical attention |
| 4.3 | Immediate/special treatment | Treatment as described above |

| Section 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 | None known |
| 5.3 | Advice for fire fighters | Self-contained breathing apparatus may be required |

| Section 6 | | ACCIDENTAL RELEASE MEASURES |
|-----------|---------------------------------------|---|
| 6.1 | Personal precautions | Adhere to personal protective measures |
| 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 | In the event of spillage, take up mechanically (e.g. sweep or vacuum up) into tightly closed containers. Adhere to personal protective measures. Flush any remainder with plenty of water. Label container and dispose of as prescribed |
| 6.4 | Reference to other sections | See section 8 for personal protective equipment |

| Section 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, cool (0-35°C) and dry, avoiding direct sunlight |
| 7.3 | Specific end use(s) | As an absorbing agent |

| Section 8 | | EXPOSURE CONTROLS / PERSONAL PROTECTION | | | |
|-----------|--|--|---|-------------------|----------------------------|
| 8.1 | Workplace Exposure Limits (WELs) have been assigned by the HSE (EH40/2005) | | | | |
| | STEL (15 mins) | ppm | 2 | mg/m ³ | Data for sodium hydroxide |
| | LTEL (8 hour TWA) | ppm | 5 | mg/m ³ | Data for calcium hydroxide |
| 8.2 | Exposure controls | | | | |
| | Engineering controls | 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) | | | |
| | Eye protection | Safety goggles if risk of eye contamination | | | |
| | Skin protection | Suitable gloves (consider your own risk assessment; e.g. breakthrough times, rates of diffusion and degradation, tasks undertaken) | | | |
| | Respiratory protection | Approved dust mask or respirator (e.g. EN 149:2001 FFP3) for dust if ventilation is insufficient | | | |
| | Other protection | Protective overalls | | | |

| Section 9 | | PHYSICAL AND CHEMICAL PROPERTIES | | |
|-----------|---------------------------|----------------------------------|----------------------------------|------------------------|
| 9.1 | Physical form | Solid | Colour | White or coloured |
| | Odour | Odourless | pH | 12-14 |
| | Boiling pt / range | Not determined | Melting pt / range | Not determined |
| | Flash point | Not applicable | Relative density | ~ 0.9g/cm ³ |
| | Water solubility | Slight | 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. Log Poct /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 | | |

| Section 10 | | STABILITY AND REACTIVITY | | |
|------------|----------------------------------|--|--|--|
| 10.1 | Reactivity | Heat is generated if exposed to acids | | |
| 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 air – formation of calcium and sodium carbonate | | |
| 10.5 | Incompatible material | Chloroform, trichloroethylene | | |
| 10.6 | Hazardous decomposition products | None | | |

| Section 11 | | TOXICOLOGICAL INFORMATION | | |
|------------|--------------------------------------|-----------------------------|-------------|----------------------------|
| 11.1 | Information on toxicological effects | | | |
| | Acute toxicity | LD (lo) rabbit (oral) | 500 mg/kg | Data for sodium hydroxide |
| | | LD ₅₀ rat (oral) | >7000 mg/kg | Data for calcium hydroxide |
| | Dermal compatibility | No data available | | |
| | Mucous membrane | No data available | | |

| Section 12 | | ECOLOGICAL INFORMATION | | | | |
|------------|-----------------------|------------------------------------|-------------------|----------------------------|----------------|-------------------|
| 12.1 | Toxicity | LC ₅₀ | Aquatic organisms | | mg/l | No data available |
| 12.2 | Degradability | Not determined | 12.3 | Bio-accumulative potential | Not determined | |
| 12.4 | Mobility in soil | Not determined | 12.5 | PBT/vPvB assessment | Not applicable | |
| 12.6 | Other adverse effects | WGK (German Water Hazard class): I | | | | |

| Section 13 | | DISPOSAL CONSIDERATIONS | |
|------------|------------------------|--|--|
| 13.1 | 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 | |
| 13.2 | Contaminated packaging | Treat empty containers in the same way as the product. If possible wash out thoroughly and recycle | |

| Section 14 | | TRANSPORT INFORMATION | | | |
|------------|--|--|------|--|--|
| 14.1 | United Nations number (ADR, IMDG, IATA) | *None | 14.2 | Proper shipping name (ADR, IMDG, IATA) | *None |
| 14.3 | Transport class(s) (ADR, IMDG, IATA) | *Exempt under special provision 62 & A16 | 14.4 | Packing group (ADR, IMDG, IATA) | *None |
| 14.5 | Environmental hazards (ADR, IMDG, IATA) | The product should not be marked as a marine pollutant | 14.6 | Special procedures (ADR, IMDG, IATA) | *Exempt under special provision 62 & A16 |
| 14.7 | Transport in bulk | Not applicable | | | |
| 14.8 | *Special provision 62 in the transport regulations (IMDG Code/RID/ADR/ADN) applies to UN 1907. This special provision clearly states that soda lime is not considered to be dangerous goods for transport when in concentrations below 4%. | | | | |
| 14.9 | *This substance contains less than 4 % sodium hydroxide and is not subject to IATA under special provision A16 | | | | |

| Section 15 | | REGULATORY INFORMATION | |
|------------|--|--|--|
| 15.1 | Safety, health and environmental regulations | The product is classified in accordance with EC Regulation 1272/2008 (CLP) | |
| 15.2 | Chemical safety assessment | Not applicable | |

| Section 16 | | OTHER INFORMATION | |
|---------------------|--|-------------------|----------------------------------|
| Further information | The SDS has been revised in accordance with EC Regulation 1272/2008 (CLP) and in response to a change of classification in the calcium hydroxide dossier of 29 May 2017 | | |
| | Comply with COSHH Regulations | | |
| | Hazard statements referred to in sections 2/3 | | |
| H314 | Causes severe skin burns and eye damage | H335 | May cause respiratory irritation |
| H315 | Causes skin irritation | H318 | Causes serious eye damage |
| Sources of data | Other suppliers' safety data sheets, Annex VI of the CLP Regulation (EC) No 1272/2008, EH40 (2011) OECD 431, 2004 Testing of chemicals, in-vitro skin corrosion, human skin test model. ECHA website | | |
| Prepared by | Dr Patricia Wormald, Molecular Products, PW@molprod.com | | |
| Date of issue | 01 October 2018 | | |
| | This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific problems | | |