Product name:

SODASORB® HMED

Revised edition no: 796 Rev D



| 1 | PRODUCT AND COMPANY IDENTIFICATION | | | | |
|-----|------------------------------------|--|--|--|--|
| 1.1 | Product Name | SODASORB® HMED | | | |
| 1.2 | CAS Number | Mixture | | | |
| 1.3 | Product Use | Absorbent Intermediate product of varied applicability in industry and trade. | | | |
| 1.4 | Supplier / Manufacturer | Molecular Products, Inc. (a subsidiary of Molecular Products Group) 633 CTC Boulevard, Louisville, CO 80027, USA | | | |
| 1.5 | Emergency Contact | +1 202 464 2554 US and Canada | | | |
| 1.6 | Date of Initial Preparation | 08 Jan 2020 | | | |
| 1.7 | Date of Previous Revision | 06 Feb 2020 | | | |

| 2 | HAZARDS IDE | HAZARDS IDENTIFICATION | | | | | | | |
|-------|--|--|------------------------|--|------------------|-------------------|--------------------------------|--|--|
| 2.1 | Classification of th | ne substance or mixture (i.e. | Sodasorb) | | | | | | |
| 2.1.1 | Classified according to OSHA 2012 HCS 29 CFR 1910.1200 and the Canadian Hazardous Products Act WHMIS 2015. The product is classified and labeled according to the Globally Harmonized System (GHS). | | | | | | | | |
| | Skin Irrit. 2 | H315 | Eye Dam. I | H318 | | STOT SE 3 | H335 | | |
| 2.1.2 | See section 16 for | section 16 for full text of H Statements | | | | | | | |
| 2.2 | Labelling elements | Labelling elements | | | | | | | |
| 2.2.1 | Labelling in accord | dance with EC Regulation No | 1272/2008 (CI | _P/GHS) | | | | | |
| | Pictograms Signal Word DANGER | | | | | DANGER | | | |
| | Hazard Statement | ts | | | | | | | |
| | H314 | | Causes sever | e skin burns and ey | e damage | | | | |
| | Precautionary Sta | tements | | | | | | | |
| | P260 | | Do not breat | he dust/fume/gas/m | ist/vapors/spray | | | | |
| | P264 | | Wash thorou | ghly after handling | | | | | |
| | P280 | | • | tive gloves/protecti | <u> </u> | | | | |
| | P303/361/353 | | IF ON SKIN water/showe | | mmediately all c | ontaminated cloth | ning. Rinse skin with | | |
| | P305/P351/P338 | | | inse cautiously with o. Continue rinsing | | ral minutes, Remo | ove contact lenses, if present | | |
| | P310 | | Immediately of | call a POISON CEN | ITER or doctor. | | | | |
| 2.3 | Other Hazards | | | | | | | | |
| | None known | | | | | | | | |

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| 3 | COMPOSITION AND INFORMATION ON INGREDIENTS | | | | | |
|-----|--|--|-----------|--|--|--|
| 3.1 | Chemical characterization | 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 | | | | |
| | Chemical name | Concentration | CAS No | Classification | | |
| | calcium hydroxide | 50-100% 1305-62-0 | | Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335 | | |
| | sodium hydroxide | <4% | 1310-73-2 | Met. Corr.1, H290; Skin Corr. 1A, H314 | | |

| 4 | FIRST-AID MEASURES | | | | |
|-----|---|---|--|--|--|
| 4.1 | Description of measures | | | | |
| | In case of unconsciousness place patient stably in the recovery position for transportation | | | | |
| | Skin contact Immediately flush skin with water for at least 15 minutes. If skin irritation occurs, consul doctor. Immediately wash with water for 30 minutes and rinse thoroughly | | | | |
| | Eye contact Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Then consult a doctor | | | | |
| | Swallowing | Do not induce vomiting: call for medical help immediately | | | |
| 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 | CO2, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam. Use fire-fighting measures that suit the environment. Carbon monoxide and carbon dioxide |
| 5.3 | Advice for firefighters | Do not inhale explosion gases or combustion gases Dispose of fire debris and contaminated fire-fighting water in accordance with official regulations |

| 6 | ACCIDENTAL RELEASE MEASURES | | | | |
|-----|---|---|--|--|--|
| 6.1 | Personal precautions | Wear protective equipment. Keep unprotected persons away | | | |
| 6.2 | Methods and materials for clean up Use neutralizing agent. Dispose contaminated material as waste according to section 13. Ensure adequate ventilation | | | | |
| 6.3 | Environmental precautions | Do not allow to get into waterways or waste water. If this occurs, inform the relevant water authorities at once | | | |
| 6.4 | Reference to other sections | See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information | | | |

| 7 | HANDLING AND STORAGE | | | | | |
|-----|--|--|--|--|--|--|
| 7.1 | Precautions for safe handling | Thorough dedusting. Handle in accordance with good hygiene practices. | | | | |
| 7.2 | Information about protection against explosions and fires | No special measures required | | | | |
| 7.3 | Conditions for safe storage, including any incompatibilities | Use only receptacles specifically permitted for this substance/product. Store away from foodstuffs. Protect from frost. Store in dry conditions | | | | |

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| 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION | | | | | |
|-----|---|--|--|---|--|--|
| 8.1 | Exposure limits/guidelines | | | | | |
| | Components with limit values that require monitoring at the workplace | recommended exposure | • | ne product which have a PEL, TLV or other posure limits. | | |
| | Chemical Name | CAS# | ACGIH TLV | OSHA PEL | | |
| | Calcium hydroxide | 1305-62-0 | Long-term value: 5 mg/m³ | PEL: Long-term value: I5* 5** mg/m³ *total dust **respirable fraction REL: Long-term value: 5 mg/m³ | | |
| | Sodium hydroxide | 1310-73-2 Ceiling limit value: 2 mg/m³ PEL: Long-term value: 2 mg/m³ REL: Ceiling limit value: 2 mg/m³ | | | | |
| 8.2 | Exposure controls | | | | | |
| | Engineering controls | No further relevant information available. | | | | |
| | Personal Protection | Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the skin. Prevent contact with the eyes and skin. | | | | |
| | Respiratory protection | respirator that is independ NIOSH approved respirat | dent of circulating air. As approptor and cartridge. | case of intensive or longer exposure use oriate for the employee exposure, use a approved respirator and cartridge. | | |
| | Skin protection | Protective gloves: Check protective gloves prior to each use for their proper condition. The glove material must be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. Recommended thickness of the material: \geq 0.5 mm | | | | |
| | Eye protection | Tightly sealed goggles | | | | |

| 9 | PHYSICAL AND CHEMICAL | PHYSICAL AND CHEMICAL PROPERTIES | | | | | | |
|---|---|--|--|---|--|--|--|--|
| | Appearance- Form | Pellets | Appearance- Color | Whitish | | | | |
| | Odor | Characteristic | pH-value | Not applicable | | | | |
| | Melting point / Melting range | Not determined | Boiling point / Boiling range | Not determined | | | | |
| | Flash Point | Not available | Flammability (solid, gaseous) | Not determined | | | | |
| | Decomposition Temperature | Not determined | Igniting | Product is not self-igniting | | | | |
| | Danger of explosion | Product does not present an explosion hazard | Upper/Lower Explosion limits | Not determined | | | | |
| | Explosion data – sensitivity to mechanical impact | Not determined | Explosion data – sensitivity to static discharge | Not determined | | | | |
| | Vapor pressure at 20°C (68 °F) | 23hPa (17.3 mm Hg) | Density | Not determined | | | | |
| | Specific Gravity | Not available | Vapor Density | Not applicable | | | | |
| | Evaporation Rate | Not applicable | Solubility in / Miscibility with water | Insoluble | | | | |
| | Coefficient of water/oil distribution | Not available | Viscosity- Dynamic | Not applicable | | | | |
| • | Viscosity- Kinematic | Not applicable | Organic solvents | 0.0% | | | | |
| | Water | 13.6% | Other information | No further relevant information available | | | | |

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| 10 | STABILITY AND REACTIVITY | |
|------|----------------------------------|---|
| 10.1 | Reactivity | No further relevant information available |
| 10.2 | Chemical stability | No decomposition if used according to specifications |
| 10.3 | Hazardous reactions | May react with trichloroethylene, producing dichloracetylene, carbon monoxide and phosgene |
| 10.4 | Conditions to avoid | In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed |
| 10.5 | Incompatible materials | Protect from contamination |
| 10.6 | Hazardous decomposition products | No dangerous decomposition products known |

| 11 | TOXICOLOGICA | AL INFORMATION | | | | | | | |
|------|--------------------------------------|---|--|----------------------------------|-----------------------------|--|-----------------------------------|--|--|
| 11.1 | | ikely routes of exposu iate effects and chronic cological effects | | t or long-tern | n exposure | | | | |
| | Acute toxicity | | | | | | | | |
| | 1305-62-0 | calcium hydroxide | Oral | LD50 | >2,000 mg/ | kg (rat) (OECD 425) | | ECHA 2011 | |
| | | | Dermal | LD50 | >2,500 mg/ | kg (rabbit) (OECD 402 |) | ECHA 2011 | |
| | 1310-73-2 | 310-73-2 sodium hydroxide Dermal LD50 1,350 mg/kg (rabbit) | | IUCLID Dataset 18-Feb-2000 | | | | | |
| | Primary irritant effect- on the skin | | | np. product | GRACE | | | | |
| | 1305-62-0 | 1305-62-0 calcium hydroxide Irritation of skin IS (rabbit) (OECD 404) | | | | | ECHA 2011 | | |
| | 1310-73-2 | 1-73-2 sodium hydroxide Irritation of skin IS 5.6 (rabbit) (§ 1500.41 in Federal Register Vol. 38, No. 187) | | | | ECHA 2014 | | | |
| | Primary irritant effect- on the eye | | | | | | | | |
| | 1305-62-0 | calcium hydroxide | | | | | | ECHA 2011 | |
| | 1310-73-2 | sodium hydroxide | | | | | ECHA 2014 | | |
| | Respiratory sensitiza | ation | No further relev | ant informatio | on available. | | | | |
| | Skin sensitization | | | | | | | | |
| | 1310-73-2 | sodium hydroxide | Sensitization | Sensitization SI 0 (human being) | | | | ECHA 2014 | |
| | Additional toxicolog | ical information | | | | | | | |
| | Carcinogenic catego | ories | IARC (International Agency for Research on Cancer) | | | None of the ingredients is listed. | | | |
| | | | NTP (National Toxicology Program): | | | None of the ingredients is listed. | | | |
| | | | OSHA-Ca (Occu | ıpational Safet | ty & Health Administration) | | None of the ingredients is listed | | |
| | CMR effects (carcine | ogenity, mutagenicity a | nd toxicity for rep | roduction) | | | | | |
| | Carcinogenicity | | No further relev | ant informatio | on available. | | | | |
| | Mutagenicity | | <u>'</u> | | | | | | |
| | 1310-73-2 | sodium hydroxide | AMES Test | | | negative with and wi metabolic activation | | | |
| | Reproductive toxicit | ty | No further releving | | | target organ toxicity xposure) | | er relevant on available. | |
| | Specific target organ exposure) | toxicity (repeated | No further relevant information available. | | Aspirati | Aspiration hazard | | No further relevant information available. | |

| 12 | ECOLOGICAL INFORMATION | | | | | | | |
|------|------------------------|---|-------------|---------------------------------|---------------------------------|------------------------------------|--------------|--|
| 12.1 | Toxicity | Toxicity | | | | | | |
| | Aquatic toxicit | Aquatic toxicity No further relevant information available. | | | | | | |
| | Fish toxicity | | | | | | | |
| | 1305-62-0 | calcium hydroxide | LC50 (96 h) | I 60 mg/I (Gambusia affinis) | IUCLID Dataset 18-Feb-2000 | 50.6 mg/l (Oncorhynchus mykiss) | ECHA 2011 | |
| | 1310-73-2 | sodium hydroxide | LC50 (48h) | 189 mg/l (Leuciscus idus) | IUCLID Dataset (18/Feb/2000) | | | |

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| 12 | ECOLOGICAL INFORMATION | | | | | | |
|------|-------------------------------|-------------------|---|---|-------------------------------|--|--------------|
| | Water flea toxicity | | | | | | |
| | 1305-62-0 calcium hydroxide | | EC50 (48 h) | 49.1 mg/l (Daphnia magna) (OECD 202) | | | ECHA 2011 |
| | 1310-73-2 sodium hydroxide | | EC50 (48 h) | 100 mg/l (Daphnia magna) | IUCLID Dataset 18-Feb-2000 | | |
| | Algae toxicity | | | | | | |
| | 1305-62-0 | calcium hydroxide | EC10 (72 h) | 79.22 mg/l (Pseudokirchneriella subcapitata) (OECD 201) | crangon septemspinosa | | |
| 12.2 | Persistence and degradability | | No further relevant information available. | | | | |
| 12.3 | Bioaccumulative potential | | No further relevant information available | | | | |
| 12.3 | Mobility in soil | | No further relevant information available. | | | | |
| 12.4 | General Notes | | Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized. | | | | |
| 12.5 | PBT / vPvB Ass | sessment | Not applicable | | | | |

| 13 | DISPOSAL CONSIDERATIONS | | | |
|----|-------------------------|---|--|--|
| | Advice on disposal | Comply with Federal, State, and local regulations. | | |
| | Contaminated packaging | Treat empty containers in the same way as product. Must not be disposed of together with garbage. Do not allow product to reach sewage system. | | |

| 14 | TRANSPORTATION INFORMATION | | | | | | |
|-------|---|--|-------|---|---|--|--|
| 14.1 | United Nations number (DOT, ADR, ADN, IMDG, IATA) | Not applicable | 14.2 | UN proper shipping name (DOT, ADR, ADN, IMDG, IATA) | Not applicable | | |
| 14.3 | Transport hazard class(es) (DOT, ADR, ADN, IMDG, IATA) class | Not applicable | 14.4 | Packing group (DOT, ADR, IMDG, IATA) | Not applicable | | |
| 14.5 | Environmental hazards | Not applicable | 14.6 | Special precautions for user | Not applicable | | |
| 14.7 | Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable | 14.8 | Transport/Additional information (DOT) Quantity limitations | Not applicable On passenger aircraft/rail: - | | |
| 14.9 | ADR Remarks: | Contains <4% Sodium Hydroxide, see Special Provision 62 | 14.10 | IMDG Remarks: | Contains <4% Sodium Hydroxide, see Special Provision 62 | | |
| 14.11 | IATA Remarks: | Contains <4% Sodium Hydroxide, see Special Provision A16 | | | | | |

| 15 | REGULATORY INFORMATION | | | |
|------|--|--|--|--|
| 15.1 | Safety, health and environmental regulations/legislation specific for the substance or mixture | | | |
| | SARA | | | |
| | SARA 302/304 None of the ingredients is listed. | | | |
| | SARA 313 None of the ingredients is listed. | | | |
| | SARA 311/312 Health Hazard - Skin corrosion or irritation | | | |
| | Health Hazard - Serious eye damage or irritation | | | |
| | Health Hazard - Specific target organ toxicity (single or repeated exposure) | | | |
| | TSCA (Toxic Substances Control Act): | Inventory listing could not be confirmed for one or more substances. | | |
| 15.2 | Proposition 65: | | | |
| | Chemicals known to cause cancer: | | | |
| | 50-00-0 | formaldehyde | | |
| | Chemicals known to cause reproductive toxicity for females: | None of the ingredients is listed. | | |

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| 15 | REGULATORY INFORMATION | | | | | |
|------|--|---------------------------------------|------------------------------------|------------------------------------|---|--|
| | Chemicals know toxicity for m | n to cause reproductive pales: | None of the ingredients is listed. | | | |
| | Chemicals know toxicity: | n to cause developmental | None of the ingredients is listed. | | | |
| 15.3 | Carcinogenic ca | tegories | | | | |
| | EPA (Environme | EPA (Environmental Protection Agency) | | None of the ingredients is listed. | | |
| | NIOSH-Ca (National Institute for Occupational Safety and Health) | | None of the ingredients is listed. | | | |
| 15.4 | Canadian Regula | ations | | | | |
| | Canadian DSL: | All ingredients are listed. | | Canadian NDSL: | All substances are listed or exempt from listing. | |

| 16 | OTHER INFORMATION | | | | | | | |
|------|--|-----------|---|----------------|--|--|--|--|
| | This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. | | | | | | | |
| 16.1 | Relevant phrases | | | | | | | |
| | H314 | Cause | s severe skin burns and eye damage | P260 | Do not breathe dust/fume/gas/mist/vapors/spray | | | |
| | P264 | Wash | thoroughly after handling | P280 | Wear protective gloves/protective clothing/eye protection/face protection | | | |
| | P303/361/353 | contar | SKIN (or hair): Take off immediately all ninated clothing. Rinse skin with 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 | Immed | liately call a POISON CENTER or doctor. | | | | | |
| 16.2 | Department issuir | ng SDS | Product Safety and Regulatory Affairs Grou | dr | | | | |
| 16.3 | Other information | n | This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties. | | | | | |
| 16.4 | Abbreviations and | l acronyr | | | | | | |
| | ADR | | Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) | | | | | |
| | IMDG | | International Maritime Code for Dangerous Goods | | | | | |
| | DOT IATA EINECS ELINCS CAS NFPA HMIS LC50 | | US Department of Transportation | | | | | |
| | | | International Air Transport Association | | | | | |
| | | | European Inventory of Existing Commercial Chemical Substances | | | | | |
| | | | European List of Notified Chemical Substances | | | | | |
| | | | Chemical Abstracts Service (division of the American Chemical Society) | | | | | |
| | | | National Fire Protection Association (USA) | | | | | |
| | | | Hazardous Materials Identification System (USA) | | | | | |
| | | | Lethal concentration, 50 percent | | | | | |
| | LD50 | | Lethal dose, 50 percent | | | | | |
| | PBT vPvB NIOSH OSHA TLV PEL | | Persistent, Bioaccumulative and Toxic | | | | | |
| | | | very Persistent and very Bioaccumulative | | | | | |
| | | | National Institute for Occupational Safety | | | | | |
| | | | Occupational Safety & Health | | | | | |
| - | | | Threshold Limit Value | | | | | |
| | | | Permissible Exposure Limit | | | | | |
| | REL | | Recommended Exposure Limit | | | | | |
| | Met. Corr. I | | Corrosive to metals – Category I | | | | | |
| | Skin Corr. IA | | Skin corrosion/irritation – Category IA | | | | | |

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| 16 | OTHER INFORMATION | | | | |
|----|--|--|--|--|--|
| | Skin Irrit. 2 | Skin corrosion/irritation – Category 2 | | | |
| | Eye Dam. I | Serious eye damage/eye irritation – Category I | | | |
| | Eye Irrit. 2A Serious eye damage/eye irritation – Category 2A | | | | |
| | STOT SE 3 Specific target organ toxicity (single exposure) – Category 3 | | | | |
| | Prepared By | Richard Mackay | | | |
| | Disclaimer: The information in this safety data sheet is based on the best knowledge available at the time and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular application. As the specific conditions of use are outside the control of the supplier, the user is responsible for ensuring that the product is used in a safe way and in compliance with the relevant requirements of legislation. | | | | |
| | Date of issue | 17 Sept 2021 | | | |