

# SAFETY DATA SHEET

Date Printed: 04/19/2024 Date Revised: 01/15/2022

## **SECTION 1. IDENTIFICATION**

Product Identifier: (5N) 99.999% Calcium Oxide Tablets

Product Code: CA-OX-05-TBS

CAS Number: 1305-78-8

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551 Fax: +1 310-208-0351 Emergency telephone number: +1 800-424-9300

## **SECTION 2. HAZARDS IDENTIFICATION**

Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin irritation(Category 2), H315 Serious eye damage(Category 1), H318 Specific target organ toxicity -single exposure(Category 3), Respiratory system, H335

GHS Label elements, including precautionary statements Pictogram



Signal word Danger Hazard statement(s) H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. Precautionary statement(s) P261 Avoid breathing dust/ fume/ gas/ mist/ Vapors/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection/ face protection. P280 Wear protective gloves. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. Hazards not otherwise classified (HNOC) or not covered by GHS Reacts with water to form corrosive calcium hydroxide, with evolution of heat. Temperatures as high as 800° C have been reached with

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances Synonyms: Quicklime Lime Formula: CaO Molecular weight: 56.08 g/mol CAS-No.: 1305-78-8 EC-No.: 215-138-9 Component Calcium oxide Classification Skin Irrit.2; Eye Dam.1; STOT SE3; H315, H318, H335 Concentration <=100%

#### **SECTION 4. FIRST AID MEASURES**

Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eve contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11 Indication of any immediate medical attention and special treatment needed No data available

## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special hazards arising from the substance or mixture Calcium oxide Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary. Further information No data available

# SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing Vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. Environmental precautions Do not let product enter drains. Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Reference to other sections For disposal see section 13.

## SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2. Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place. Storage class (TRGS 510): Non Combustible Solids Specific end use(s) Apart from the uses mentioned in section 1 no other specific uses are stipulated

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

EN 374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Do not let product enter drains.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties Appearance Form: powder, pieces, or solid in various forms Odor No data available Odor Threshold No data available pН 12.5 -12.8 at 1.65 g/l at 25 °C (77 °F) Melting point/freezing Melting point/range: 2,614 °C (4,737 °F) Initial boiling point and boiling range 2,850 °C (5,162 °F)-lit. Flash point N/A Evaporation rate No data available Flammability (solid, gas) No data available Upper/lower flammability or explosive limits No data available Vapor pressure No data available Vapor density No data available Relative density 3.3 g/cm3 at 25 °C (77 °F) Water solubility soluble Partition coefficient: n-octanol/water No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity No data available **Explosive** properties No data available Oxidizing properties No data available Other safety information No data available

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity No data available Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions No data available Conditions to avoid Avoid moisture. Incompatible materials acids, Water Hazardous decomposition products Other decomposition products-No data available In the event of fire: see section 5

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity No data available Inhalation: No data available Dermal: No data available Skin corrosion/irritation Skin-Human Result: Severe skin irritation Serious eye damage/eye irritation Eyes-Rabbit Result: Risk of serious damage to eyes.(OECD Test Guideline 405) Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity No data available Specific target organ toxicity -single exposure Inhalation-May cause respiratory irritation. Specific target organ toxicity -repeated exposure No data available Aspiration hazard No data available Additional Information RTECS: EW3100000 Cough, Shortness of breath, Headache, Nausea, Vomiting To the best of our knowledge, the chemical, physical, and toxicological properties have not been

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity Toxicity to fish LC50-Cyprinus carpio (Carp)-1,070 mg/l-96 h Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted Other adverse effects No data available

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product.

#### **SECTION 14. TRANSPORT INFORMATION**

DOT (US) Not dangerous goods IMDG Not dangerous goods IATA UN number: 1910 Class: 8 Packing group: III Proper shipping name: Calcium oxide

## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards Acute Health Hazard Massachusetts Right To Know Components Calcium oxide CAS-No. 1305-78-8 **Revision Date** 1993-04-24 Pennsylvania Right To Know Components Calcium oxide CAS-No. 1305-78-8 **Revision Date** 1993-04-24 New Jersey Right To Know Components Calcium oxide CAS-No. 1305-78-8 **Revision Date** 1993-04-24 California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.