


<a href="#">Tricalcium Silicate</a>		<a href="#">Pricing &gt;</a>
Linear Formula	3CaO•SiO <sub>2</sub>	
Pubchem CID	25523	
MDL Number	N/A	
EC No.	235-336-9	
IUPAC Name	dicalcium; oxocalcium; silicate	
Beilstein/Reaxys No.	N/A	
SMILES	[O-][Si]([O-])([O-])[O-].O=[Ca].[Ca+2].[Ca+2]	
Inchl Identifier	InChI=1S/3Ca.O4Si.O/c;;;1-5(2,3)4;/q;2*+2;-4;	
Inchl Key	BCAARMUWIRURQS-UHFFFAOYSA-N	
Signal Word	Warning	
Hazard Statements	H319-H335	
Hazard Codes	Xi	
Precautionary Statements	P261-P264-P271-P280-P304+P340-P305+P351+P338-P312-P337+P313-P403+P233-P405-P501	
Risk Codes	36/37	
Safety Statements	22-26-37/39	
Transport Information	NONH for all modes of transport	
WGK Germany	3	
GHS Pictograms	<a href="#">GHS07 Exclamation Point</a> 	

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## SAFETY DATA SHEET

Date Accessed: 04/19/2024

Date Revised: 01/15/2022

### SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #12168-85-3

**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:  
Domestic, North America +1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture  
GHS Classification in accordance with 29 CFR 1910  
(OSHA HCS)  
Eye irritation(Category 2A), H319  
Specific target organ toxicity -single  
exposure(Category 3), Respiratory system, H335  
GHS Label elements, including precautionary  
statements  
Pictogram



Signal word  
Warning  
Hazard statement(s)  
H319  
Causes serious eye irritation.  
H335  
May cause respiratory irritation.  
Precautionary statement(s)  
P261  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264  
Wash skin thoroughly after handling.  
P271  
Use only outdoors or in a well-ventilated area.  
P280  
Wear protective gloves/ eye protection/ face  
protection.  
P304 + P340  
IF INHALED: Remove victim to fresh air and keep at  
rest in a position comfortable for breathing.  
P305 + P351 + P338  
IF IN EYES: Rinse cautiously with water for several  
minutes. Remove contact lenses, if present and easy  
to do. Continue rinsing.  
P312  
Call a POISON CENTER or doctor/ physician if you  
feel unwell.  
P337 + P313  
If eye irritation persists: Get medical advice/ attention.  
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-none

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

Substances  
Synonyms: Alite  
Formula:  $\text{Ca}_3\text{SiO}_5$   
CAS-No.: 12168-85-3

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### **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 eye contact  
Rinse thoroughly with plenty of water for at least 15  
minutes and consult a physician.  
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

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### **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, silicon oxides  
Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.  
Further information  
no data available

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, 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.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.  
For precautions see section 2.  
Conditions for safe storage, including any incompatibilities  
Keep container tightly closed in a dry and well-ventilated place.  
Specific end use(s)  
Apart from the uses mentioned in section 1 no other specific uses are stipulated

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters  
Components with workplace control parameters  
Contains no substances with occupational exposure limit values.  
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  
Safety glasses with side-shields conforming to EN166  
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.  
Body Protection  
Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Respiratory protection  
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

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

Appearance  
Form: solid  
Odour  
no data available  
Odour Threshold  
no data available  
pH  
no data available  
Melting point/freezing point  
no data available  
Initial boiling point and boiling range  
no data available  
Flash point  
not applicable  
Evaporation rate  
no data available

Flammability (solid, gas)  
no data available  
Upper/lower flammability or explosive limits  
no data available  
Vapour pressure  
no data available  
Vapour density  
no data available  
Relative density  
2.900 g/cm<sup>3</sup>  
Water solubility  
no data available  
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

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## **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  
no data available  
Incompatible materials  
Strong oxidizing agents  
Hazardous decomposition products  
Other decomposition products-no data available  
In the event of fire: see section 5

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects  
Acute toxicity  
no data available  
Dermal:  
no data available

Skin corrosion/irritation  
no data available  
Serious eye damage/eye irritation  
no data available  
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: VV9170000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity  
no data available  
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

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## **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.  
Contaminated packaging  
Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)  
Not dangerous goods  
IMDG  
Not dangerous goods  
IATA  
Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components  
SARA 302: No chemicals in this material are subject  
to the reporting requirements of SARA Title III,  
Section 302.  
SARA 313 Components  
SARA 313: 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  
No components are subject to the Massachusetts  
Right to Know Act.  
Pennsylvania Right To Know Components  
Calcium silicate  
CAS-No.  
1344-95-2  
Revision Date  
New Jersey Right To Know Components  
Calcium silicate  
CAS-No.  
1344-95-2



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.

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## **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.

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