spectrum[®]



SAFETY DATA SHEET

Preparation Date: 8/13/2015	Revision date 12/17/2018	Revision Number: G2
	1. Identification	
Product identifier		
Product code:	C1388	
Product Name:	CALCIUM PEROXIDE, FCC	
Other means of identification		
Synonyms:	Calcium Superoxide	
	Calper Calcium dioxide	
CAS #:	1305-79-9	
RTECS #	Not available	
CI#:	Not available	
Recommended use of the chem	ical and restrictions on use	
Recommended use:	In pesticides. Agriculture. Food Additive. Cosm In rubber. Research and Development. Manufa	
Uses advised against	No information available	
Supplier:	Spectrum Chemical Mfg. Corp	
	14422 South San Pedro St.	
	Gardena, CA 90248	
	(310) 516-8000	
Order Online At:	https://www.spectrumchemical.com	
Emergency telephone number	Chemtrec 1-800-424-9300	
Contact Person:	Tom Tyner (USA - West Coast)	
Contact Person:	Ibad Tirmiz (USA - East Coast)	
	2. HAZARDS IDENTIFICATION	

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 2

Label elements

Danger

Hazard statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation May intensify fire; oxidizer



Hazards not otherwise classified (HNOC) Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep/Store away from clothing and other combustible materials Take any precaution to avoid mixing with combustibles Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Calcium Peroxide	1305-79-9	100

4. FIRST AID MEASURES

 First aid measures

 General Advice:
 National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

 Skin Contact:
 Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

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Eye Contact:	Flush eyes with water for physician.	r 15 minutes. Get medical attention. If symptoms persist, call a	
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.		
Ingestion:		vithout medical advice. Never give anything by mouth to an nsult a physician if necessary.	
Most important symptoms and effe	cts, both acute and delay	<u>ved</u>	
Symptoms	Causes serious eye irritation Causes skin irritation Irritating to respiratory system May cause inflammation of the lungs (pneumonitis) Ingestion of large amounts may cause gastrointestinal/digestive irritation or upset.		
Indication of any immediate medica	al attention and special tr	reatment needed	
Notes to Physician:	Treat symptomatically.		
Protection of first-aiders First-Aid Providers: Avoid exposure t contaminated clothing and equipment		ar gloves and other necessary protective clothing. Dispose of	
	5. FIRE-FIGHT	ING MEASURES	
<u>Extinguishing Media</u> Suitable Extinguishing Media:		Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.	
Unsuitable Extinguishing Media	1:	Dry chemical. Foam. Halons.	
Specific hazards arising from	n the chemical		
Hazardous combustion product	s	Calcium oxides.	
Specific hazards		Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.). The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.	
Special Protective Actions for	or Firefighters		
Specific Methods:		For large fires, flood fire area with water from a distance Cool affected containers with flooding quantities of water Do not get water inside containers DO NOT use combustible materials such as sawdust	
Special Protective Equipment for	or Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Avoid dust formation. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.			
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains. Do not let this chemical enter the environment.			
Methods and material for containment and cleaning up				
Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.			
Methods for cleaning up	Neutralize with a dilute solution of acetic acid. Dilute with water. Sweep up and shovel. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. Clean contaminated surface thoroughly.			

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest. When using do not smoke. Keep away from combustible material. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Do not store near combustible materials. Keep container tightly closed in a dry and well-ventilated place. May corrode metallic surfaces. Do not store in uncoated metallic containers. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Combustible materials Powdered metals Organic materials Reducing agents Hydrogen peroxide Alcohols

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Calcium Peroxide	1305-79-9	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Calcium Peroxide	1305-79-9	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Calcium Peroxide	1305-79-9	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

> Flashpoint (°C/°F): No information available

Lower Explosion Limit (%):

No information available

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles or Safety glasses with side-shield	ds.	
Skin and body protection:	Boots Chemical resistant apron Gloves Long sleeved clothing		
Respiratory protection:	Effective dust mask. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.		
Hygiene measures:	Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product		
g	. PHYSICAL AND CHEMICAL PROPE	RTIES	
Physical state: Solid	Appearance: Powder. Granular.	Color: White to yellowish.	
Odor: Odorless.	Taste No information available.	Formula CaO2	

Molecular/Formula weight (g/mole):Flammability (solid, gas)72.08 g/molno data available

Flash Point Tested according to:Autoignition Temperature (°C/°F):Not availableNo information available

Product code: C1388

Product name: CALCIUM PEROXIDE, FCC **Upper Explosion Limit (%):** No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Melting point/range(°C/°F): No information available

Bulk density: 400-500 kg/m³

pH 12.3 (1%)

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: Practically insoluble in water **Decomposition temperature(°C/°F):** 275°C/527°F

Density (g/cm3): 2.92

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity

Oxidizer. Reacts with reducing agents, organic material, combustible materials, and powdered metals Reacts with alcohols and hydrogen peroxide

Chemical	stability

Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	: Hazardous polymerization does not occur May release toxic and/or corrosive fumes Contact with powdered metals may cause fire or explosion Contact with combustible materials (wood, paper, oil, clothing, etc.) may cause fire Can react vigorously on contact with reducing materials
Conditions to avoid:	Avoid dust formation. Contact with combustible materials (wood, paper, oil, clothing, etc.). Heat, flames and sparks. Incompatible materials.
Incompatible Materials:	Combustible materials Powdered metals Organic materials Reducing agents Hydrogen peroxide Alcohols
Hazardous decomposition products:	Calcium oxides. Oxygen.
Other Information Corrosivity:	No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Acute Toxicity

Component Information

Calcium Peroxide			
CAS No	1305-79-9		
LD50/oral/rat = > 5 g/kg oral			
LD50/oral/mouse = No inform LD50/dermal/rabbit = No inform			
LD50/dermal/rat = $> 10 \text{ g/kg}$			
LC50/inhalation/rat = 68 g/m			
LC50/inhalation/mouse = No			
Other LD50 or LC50informat	ion = No information available		
Product Information			
LD50/oral/rat = Value - Acute Tox = > 5 g/kg			
LD50/oral/mouse = Value - Acute Tox Oral = No inf	ormation available		
LD50/dermal/rabbit Value - Acute Tox = No informat	ion available		
LD50/dermal/rat VALUE - Acute Tox Dermal = 10	D g/kg		
LC50/inhalation/rat VALUE-Vapor = No information a	available		
VALUE-Gas = No information available			
VALUE-Dust/Mist = 68 g/m ³			
LC50/Inhalation/mouse			
VALUE-Vapor = No information a	available		
VALUE - Gas = No information a			
VALUE - Dust/Mist = No informa	tion available		
<u>Symptoms</u>			
Skin Contact:	Severe skin irritation. Skin contact may result in redness, pain, inflammation itching, scaling, and/or blistering.	,	
Eye Contact:	Causes serious eye irritation. Symptoms may include burning sensation, tea redness, blurred vision, inflammation. May cause burns.	iring,	
Inhalation	May cause irritation of the respiratory tract and mucous membranes irritation cause chemical pneumonitis.	n. May	
Ingestion	May cause digestive (gastrointestinal) tract irritation with nausea, vomiting, diarrhea.		
Aspiration hazard	No information available.		
Product code: C1388	Product name: CALCIUM	Page	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Calcium Peroxide	1305-79-9	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	No information available

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	May be harmful to the aquatic environment.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility in soil Other adverse effects	No information available No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Product code: C1388

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Calcium Peroxide	1305-79-9	None	None	None	None

14. TRANSPORT INFORMATION

DOT UN-No: Proper Shipping Name: Hazard Class Subsidiary Class Packing group: Emergency Response Guide Number Marine Pollutant DOT RQ (lbs): Special Provisions Symbol(s): Description:	UN1457 Calcium peroxide 5.1 No information available II 140 Severe Marine Pollutant No information available IB6, IP2, T3, TP33, W100 No information available UN1457, Calcium peroxide, 5.1, II
TDG (Canada) UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group: Marine Pollutant Description:	UN1457 Calcium peroxide 5.1 No information available II No Information available UN1457, Calcium peroxide, 5.1, II
ADR UN Number Proper Shipping Name: Transport hazard class(es) Packing group Subsidiary Risk: Description:	UN1457 Calcium peroxide 5.1 II No information available UN1457, Calcium peroxide, 5.1, II
IMDG UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Marine Pollutant EMS: Description	UN1457 Calcium peroxide 5.1 No information available II No information available F-G UN1457, Calcium peroxide, 5.1, II
RID UN Number Proper Shipping Name: Transport hazard class(es)	UN1457 Calcium peroxide 5.1

Subsidiary Risk: Packing group Description:	No information available II UN1457, Calcium peroxide, 5.1, II
ICAO (air) UN-No: Proper Shipping Name: Hazard Class Subsidiary Risk: Packing Group: Description:	UN1457 Calcium peroxide 5.1 No information available II UN1457, Calcium peroxide, 5.1, II
IATA UN Number Proper Shipping Name: Transport hazard class(es) Subsidiary Risk: Packing group Precautionary Statements - Response Special Provisions Description:	UN1457 Calcium peroxide 5.1 No information available II 5L No information available UN1457, Calcium peroxide, 5.1, II

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Calcium Peroxide	1305-79-9	PresentACTIV E	Present KE-04597	Present	Present (1)-190	Present	Present	Present 215-139-4

U.S. Regulations

Calcium Peroxide

New Jersey RTK Hazardous Substance List: 0328

FDA - 21 CFR - Total Food Additives 136.11

- List Sourced from EAFUS

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<u>Chemicals Known to the State of California to Cause Reproductive Toxicity:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
		_		Reproductive	Reproductive
				Toxicity	Toxicity:
Calcium Peroxide	1305-79-9	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Calcium Peroxide	1305-79-9	None	None	None	None	None

U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Calcium Peroxide	1305-79-9	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification	Not a dangerous product according to HPR classification criteria.
Information:	

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Calcium Peroxide	1305-79-9	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Calcium Peroxide	1305-79-9	Not listed
Component		CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Calcium Peroxide	1305-79-9	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Calcium Peroxide	1305-79-9	

EU - CLP (1272/2008)

R-phrase(s)

R 8 - Contact with combustible material may cause fire.

R41 - Risk of serious damage to eyes

R36/37 - Irritating to eyes and respiratory system

S -phrase(s)

S17 - Keep away from combustible material

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 - After contact with skin, wash immediately with plenty of water

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S63 - In case of accident by inhalation: remove casualty to fresh air and keep at rest

S 1/2 - Keep locked up and out of the reach of children.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Calcium Peroxide	1305-79-9		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: Xi - Irritant





16. OTHER INFORMATION

Preparation Date:	8/13/2015
Revision date	12/17/2018
Prepared by:	Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet