# SAFETY DATA SHEET SPECTRUM®



Revision date 15-January-2021

**Revision Number** 2

## 1. Identification

**Product identifier** 

Product Name CALCIUM CARBIDE, LUMP

Other means of identification

Product Code(s) C1068

UN/ID no UN1402

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

**Supplier Address** 

Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

# 2. Hazard(s) identification

## Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Substances or mixtures which, in contact with water, emit flammable gases	Category 1

# Hazards not otherwise classified (HNOC)

Not applicable

## Label elements

# Danger

## Hazard statements

Causes severe skin burns and eye damage

May cause respiratory irritation

In contact with water releases flammable gases which may ignite spontaneously



Appearance Lumps Physical state Solid Odor Garlic

## **Precautionary Statements - Prevention**

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not allow contact with water

Handle under inert gas. Protect from moisture

## **Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor

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

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

Wash contaminated clothing before reuse

Brush off loose particles from skin and immerse in cool water/wrap in wet bandages

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam to extinguish

## **Precautionary Statements - Storage**

Store locked up.

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

Store in a dry place

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Other information

Reacts violently with water.

# 3. Composition/information on ingredients

## **Substance**

Chemical name	CAS No	Weight-%	Trade secret
Calcium Carbide	75-20-7	100	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

## **Description of first aid measures**

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

**Inhalation** Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way

valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical advice/attention.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

**Ingestion** Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get immediate medical

advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

**Symptoms** Burning sensation.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

# 5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors.

Hazardous combustion products Hydrogen fluoride.

**Explosion data** 

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Methods for containment

Methods for cleaning up Pick up and transfer to properly labeled containers.

# 7. Handling and storage

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with Advice on safe handling

clothing and wash before reuse. Avoid breathing vapors or mists.

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Store locked up. Keep out of the reach of children. Store away from other

materials.

# 8. Exposure controls/personal protection

## Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure

limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

## Appropriate engineering controls

**Engineering controls** Showers

> Eyewash stations Ventilation systems.

## Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

# 9. Physical and chemical properties

# Precautions for safe handling

**Storage Conditions** 

Information on basic physical and chemical properties

Physical state Solid **Appearance** Lumps

Color Gray; dark blue; black

Odor Garlic

No information available **Odor threshold** 

**Property Values** Remarks • Method

12.48 (2%) [Calcium hydroxide] pН None known 2300 °C / 4172 °F Melting point / freezing point None known no data available None known Boiling point / boiling range Flash point no data available None known **Evaporation rate** no data available None known Flammability (solid, gas) no data available None known Flammability Limit in Air None known

Upper flammability or explosive No data available

limits

Vapor pressure

Vapor density

No data available

Lower flammability or explosive limits

No data available no data available 2.22

None known None known None known None known

Relative density Water solubility Reacts with water Solubility(ies) no data available **Partition coefficient** No data available

None known None known

**Autoignition temperature Decomposition temperature**  325 - 390 °C / 617 - 734 °F

None known None known

Kinematic viscosity Dynamic viscosity

no data available

None known

No data available

None known

Other information

No information available **Explosive properties Oxidizing properties** No information available Softening point No information available

Molecular weight 64 10

**VOC Content (%)** No information available **Liquid Density** No information available No information available **Bulk density** 

## 10. Stability and reactivity

No information available. Reactivity

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Acids. Bases. Oxidizing agent.

Hazardous decomposition products None known based on information supplied.

# 11. Toxicological information

Information on likely routes of exposure

**Product Information** 

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation.

> (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and

increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal. May cause irritation of respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye

damage. (based on components). Corrosive to the eyes and may cause severe damage

including blindness. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns.

**Ingestion** Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

## Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

**Acute toxicity** 

**Numerical measures of toxicity** 

No information available

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes.

Causes burns.

Respiratory or skin sensitization

Germ cell mutagenicity

No information available. No information available.

Reproductive toxicity No information available.

**STOT - single exposure**STOT - repeated exposure
May cause respiratory irritation.
No information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

# 12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Calcium Carbide	-	LC50: >50mg/L (96h,	-	-
75-20-7		Oncorhynchus mykiss)		

Persistence and degradability

**Bioaccumulation** 

No information available. Inherently biodegradable.

Other adverse effects No information available.

# 13. Disposal considerations

## Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

# 14. Transport information

DOT

UN/ID no UN1402
Proper Shipping Name: Calcium carbide

Hazard class 4.3 Packing group:

**Special Provisions** A1, A8, B55, B59, IB4, IP1, N34, T9, TP7, TP33, W32

Marine Pollutant

Description:

Severe Marine Pollutant
UN1402, Calcium carbide, 4.3, I

Emergency Response Guide 138

Number

**TDG** 

UN-No: UN1402
Proper Shipping Name: Calcium carbide

Hazard class 4.3 Packing Group:

**Description:** UN1402, Calcium carbide, 4.3, I

MEX

UN-No UN1402 Proper Shipping Name Calcium carbide

Hazard class 4.3 Packing Group

**Description** UN1402, Calcium carbide, 4.3, I

ICAO (air)

UN-No: UN1402
Proper Shipping Name: Calcium carbide

Hazard class 4.3 Packing Group:

**Description:** UN1402, Calcium carbide, 4.3, I

IATA

UN number UN1402 Proper Shipping Name: Calcium carbide

Transport hazard class(es) 4.3 Packing group

**Description:** UN1402, Calcium carbide, 4.3, I

**IMDG** 

UN number UN1402 Proper shipping name Calcium carbide

Transport hazard class(es) 4.3
Packing group I
EmS-No F-G, S-N
Special Provisions 951
Marine pollutant NP1

**Description** UN1402, Calcium carbide, 4.3, I

RID

UN number UN1402
Proper Shipping Name: Calcium carbide

Transport hazard class(es) 4.3

Packing group I Classification code W2

**Description:** UN1402, Calcium carbide, 4.3, I

Labels 4.3

<u>ADR</u>

UN number 1402

Proper Shipping Name: Calcium carbide

Transport hazard class(es) 4.3
Packing group | I
Classification code | W2
Tunnel restriction code | (B/E)

**Description:** 1402, Calcium carbide, 4.3, I, (B/E)

Labels 4.3

**ADN** 

UN/ID No UN1402 Proper shipping name Calcium carbide

Transport hazard class(es) 4.3
Packing Group 1
Classification code W2

**Description** UN1402, Calcium carbide, 4.3, I

Hazard label(s) 4.3
Limited quantity (LQ) 0
ventilation VE01
Equipment Requirements PP, EX, A

# 15. Regulatory information

## **International Inventories**

TSCA Complies

DSL/NDSL Complies EINECS/ELINCS Complies

**ENCS** This product complies with ENCS: **IECSC** This product complies with China:

**KECL** Complies PICCS Complies

AICS All the constituents of this material are listed on the Australian Inventory of Chemical

Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

# **US Federal Regulations**

## **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

## SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

## **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Calcium Carbide	10 lb final RQ	-
75-20-7	4.54 kg final RQ	

## **US State Regulations**

## **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

## U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

# 16. Other information

**NFPA** 

Health hazards 3 Flammability 1 Instability 0

Physical and chemical properties W

<u>HMIS</u>

Health hazards 3 Flammability 1 Physical hazards 0 Personal protection X

## Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

# Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Revision date 15-January-2021 Revision Note 15-January-2021 No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**