



Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 331

Date of review: July 22, 2015

1 Identification of substance and company

Product name: **Cadmium Carbonate**
Product code: 12677, 12741
Relevant use and restrictions on use: Research and product development
Manufacturer/Supplier: Noah Technologies Corporation
1 Noah Park
San Antonio, Texas 78249-3419
Phone: 210-691-2000
Fax: 210-691-2600
Web site: www.noahtech.com
Emergency information: CHEMTREC
800-424-9300

2 Hazards identification

Emergency Overview:



Signal word(s): Danger
Hazard statements: H302 + H312 - Harmful if swallowed or in contact with skin
H330 - Fatal if inhaled
H341 - Suspected of causing genetic defects
H350 - May cause cancer
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements: P260 - Do not breathe dust / fume / gas / mist / vapours / spary
P264 - Wash skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment
P280 - Wear protective gloves / protective clothing / eye protection / face protection
P284 - Wear respiratory protection
P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell. Rinse mouth.
P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor / physician if you feel unwell
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor / physician.
P308 + P313 - IF exposed or concerned: Get medical advice / attention.
Hazards not otherwise classified: None
Ingredients of unknown acute toxicity: None
GHS Classification: Acute toxicity, Oral - 4
Acute toxicity, Inhalation - 2
Acute toxicity, Dermal - 4
Germ cell mutagenicity - 2
Carcinogenicity - 1B
Reproductive toxicity - 2
Specific target organ toxicity - repeated exposure - 1
Acute aquatic toxicity - 1
Chronic aquatic toxicity - 1
HMIS ratings (scale 0-4): Health hazard: 4*
Flammability: 0
Physical hazard: 0

3 Composition/Information on ingredients

Chemical name: Cadmium carbonate
Designation:
CAS number: 513-78-0
EC number: 208-168-9
Formula: CdCO₃

Synonyms: Cadmium monocarbonate, Chemcarb, Kalcit
Ingredients of known acute toxicity: Cdadium carbonate

4 First aid measures

After inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact: Wash off with soap and plenty of water. Consult a physician.
After eye contact: Flush with plenty of water for at least 15 minutes. Consult a physician.
After ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Information for doctor: Show this safety data sheet to the doctor in attendance
Symptoms/effects; acute and delayed: Coughing, chest pains, sweating, chills, shortness of breath and possible death due to pulmonary edema
Immediate medical attention and special treatment needed: See above

5 Fire-fighting measures

Suitable and unsuitable extinguishing agents: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Special hazards caused by the material, its products of combustion or resulting gases: Toxic fumes of cadmium, cadmium oxide, carbon monoxide and dioxide
Special fire fighting procedures: Wear self-contained breathing apparatus and fully protective fire fighting equipment/clothing
Unusual fire and explosion hazard: No available data

6 Accidental release measures

Person-related safety precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
Measures for environmental protection: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Measures for cleaning/collecting: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for proper disposal.
Additional information: See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment
See Section 13 for information on disposal
See Section 15 for regulatory information

7 Handling and storage

Information for safe handling: Avoid contact with skin and eyes. Avoid dust formation. Provide appropriate exhaust ventilation.
Information about protection against explosions and fires: No data available
Storage requirements to be met by storerooms and containers: Keep container tightly closed in a dry and well-ventilated place
Incompatibility (avoid contact with): Strong acids and oxidizers. Reacts violently with potassium.
Further information about storage conditions: No data available

8 Exposure controls/personal protection

Ventilation requirements: Local exhaust, chemical fume hood
Components with exposure limits that require monitoring: OSHA PEL: 0.005 mg(Cd)/m3
ACGIH TLV: 0.01 mg(Cd)/m3, 0.002 mg(Cd)/m3 (respirable dust)
Additional information: No additional data available
General protective and hygienic measures: The usual precautionary measures for handling chemicals should be adhered to
Keep away from foodstuffs, beverages and food
Instantly remove any soiled and impregnated garments
Wash hands during breaks and at the end of the work
Avoid contact with the eyes and skin
Personal protective equipment:
Respiratory protection: Filter-dust, fume, mist; respirator equipped with HEPA
(Use only NIOSH or CEN approved Equipment)
Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique.
Eye protection: Safety glasses, goggles
Skin protection: Completely covering work attire with full length apron
Additional protective equipment: Sufficient to prevent contact. Emergency eyewash and safety shower
Precautionary labeling: Wash thoroughly after handling
Do not get in eyes, on skin or on clothing
Do not breathe dust, vapor, mist, gas
Keep away from heat, sparks, and open flames
Empty container may contain hazardous residues

9 Physical and chemical properties

Physical state: Powder and chunks
Color: White
Odor: Odorless
Odor threshold: Not determined
Molecular Weight (Calculated): 172.41
pH Not determined
Melting point/freezing point/range: 500 C (dec)

Boiling point/range:	Not determined
Sublimation temperature/start:	Not determined
Decomposition temperature:	Not determined
Flammability (solid, gas):	Not determined
Flash point:	Not determined
Autoignition temperature:	Not determined
Danger of explosion:	Not determined
Flammable limits:	
Lower:	Not determined
Upper:	Not determined
Evaporation Rate:	Not determined
Vapor pressure (mm Hg):	Not determined
Vapor density:	Not determined
Specific gravity:	4.26 g/cm ³ @ 20 C
Bulk density:	Not determined
Solubility in/Miscibility with water:	Insoluble
Partition coefficient n-octanol/water:	Not determined
Viscosity:	Not determined
Other information:	Not determined

10 Stability and reactivity

Reactivity:	Not determined
Chemical stability:	Stable under recommended storage conditions
Possibility of hazardous reactions:	Not determined
Conditions to be avoided:	Heat. Contact with incompatibles
Materials to be avoided:	See section 7 for information on proper handling and storage
Dangerous reactions:	Strong acids and oxidizers. Reacts violently with potassium.
Hazardous decomposition products: (thermal and other)	Toxic fumes of cadmium, cadmium oxide, carbon monoxide and dioxide

11 Toxicological information

LD/LC50 values that are relevant for classification:	orl-rat LD ₅₀ : 435 mg/kg sce-ham: ovr 870 nmol/L orl-mus LD ₅₀ : 310 mg/kg
Irritation or corrosion of skin:	No data available
Irritation or corrosion of eyes:	No data available
Primary irritant or corrosive effect:	
on the skin:	Mild
on the eye:	Mild
Sensitization:	No data available
Potential health effects:	
Inhalation:	May be fatal
Ingestion:	May be fatal
Skin:	May cause irritation
Eyes:	May cause irritation
Signs and symptoms of exposure:	Harmful if swallowed, inhaled, or absorbed through skin. Poison by ingestion, however, the irritating and emetic action is so fatal poisoning rarely ensues. Inhalation of cadmium compounds causes lung cancer in humans. Experimental carcinogen and tetratogen. Inhalation of fumes or dusts affects the respiratory tract and the kidneys. Brief exposure to high concentrations may result in pulmonary edema and death. Fatal concentrations may be breathed without sufficient discomfort to warn workman to leave the exposure.
Carcinogenicity:	IARC - 1: Carcinogenic to humans NTP-1: Known to be carcinogenic: sufficient evidence from human studies OSHA - Specifically regulated carcinogen ACGIH-A2: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies
Additional information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

12 Ecotoxicological information

Toxicity:	
Toxicity to fish:	Fathead minnow LC ₅₀ : 2.658 mg/L:96H
Toxicity to daphnia and other aquatic invertebrates:	No data available
Toxicity to algae:	No data available
Persistence and degradability:	
Biodegradability:	No data available
Bioaccumulative potential:	
Bioaccumulation:	No data available
Mobility in soil:	No data available
Other adverse effects:	Very toxic to aquatic life with long lasting effects

13 Disposal considerations

Recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste
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Must be specially treated under adherence to official regulations
Disposal must be made according to official regulations

Unclean packagings recommendation:

14 Transport information

Land transport DOT



Proper shipping name:	Cadmium compounds
Technical name:	Cadmium carbonate
DOT Hazard Class:	6.1
UN Identification number:	UN2570
Label(s):	PGIII and Marine Pollutant
Packing group:	III
North American Emergency Response Guidebook No.:	154

Air transport ICAO-TI and IATA-DGR:



Proper shipping name:	Cadmium compounds
Technical name:	Cadmium carbonate
DOT Hazard Class:	6.1
UN Identification number:	UN2570
Label(s):	Toxic and Marine Pollutant
Packing group:	III
North American Emergency Response Guidebook No.:	154

UPS Ground / FedEx Ground



Proper shipping name:	Cadmium compounds
Technical name:	Cadmium carbonate
DOT Hazard Class:	6.1
UN Identification number:	UN2570
Label(s):	PGIII and Marine Pollutant
Packing group:	III
North American Emergency Response Guidebook No.:	154

UPS Air



Proper shipping name:	Cadmium compounds
Technical name:	Cadmium carbonate
DOT Hazard Class:	6.1
UN Identification number:	UN2570
Label(s):	DOT-SP-8249 and Marine Pollutant
Packing group:	III
North American Emergency Response Guidebook No.:	154

15 Regulatory information

SARA Section 302 Extremely Hazardous components and corresponding TPQs:

SARA Section 311 / 312 hazards:

SARA Section 313 components:

California Proposition 65 components:

TSCA:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302 Acute Health Hazard, Chronic Health Hazard
The following components are subject to reporting levels established by SARA Title III, Section 313:
Cadmium carbonate - CAS No. 513-78-0 - Revision Date: 2007-03-01
WARNING: This product contains a chemical known to the State of California to cause cancer.
Cadmium carbonate - CAS No. 513-78-0 - Revision Date: 2007-09-28
Product is listed on TSCA Inventory

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.