# Chemical Safety Data Sheet MSDS / SDS

# **LEAD CARBONATE**

Revision Date: 2024-02-24 Revision Number: 1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### **Product identifier**

Product name : LEAD CARBONATE

CBnumber : CB6317960

CAS : 598-63-0

EINECS Number : 209-943-4

Synonyms : LEAD CARBONATE

# Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

# **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

# **SECTION 2: Hazards identification**

# Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Acute toxicity - Category 4, Inhalation

Reproductive toxicity, Category 1A

Specific target organ toxicity - repeated exposure, Category 2

Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1

Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

# Label elements

## Pictogram(s)

Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed

H332 Harmful if inhaled

H360 May damage fertility or the unborn child

, ,

H373 May cause damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

#### Precautionary statement(s)

P201 Obtain special instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

#### Prevention

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P203 Obtain, read and follow all safety instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

#### Response

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P317 Get medical help.

P318 IF exposed or concerned, get medical advice.

P319 Get medical help if you feel unwell.

P391 Collect spillage.

#### Storage

P405 Store locked up.

# Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

#### Other hazards

no data available

# SECTION 3: Composition/information on ingredients

# **Substance**

Product name : LEAD CARBONATE
Synonyms : LEAD CARBONATE

CAS : 598-63-0

EC number : 209-943-4
MF : CO3Pb
MW : 267.21

# SECTION 4: First aid measures

## Description of first aid measures

#### If inhaled

Fresh air, rest.

#### Following skin contact

Remove contaminated clothes. Rinse and then wash skin with water and soap.

#### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

## Following ingestion

Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention .

## Most important symptoms and effects, both acute and delayed

no data available

# Indication of any immediate medical attention and special treatment needed

Immediate first aid: Ensure that adequate decontamination has been carried out. If patient is not breathing, start artificial respiration, preferably with a demand-valve resuscitator, bag-valve-mask device, or pocket mask, as trained. Perform CPR as necessary. Immediately flush contaminated eyes with gently flowing water. Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. Keep patient quiet and maintain normal body temperature.

Obtain medical attention. Lead and related compounds

# **SECTION 5: Firefighting measures**

## Extinguishing media

In case of fire in the surroundings, use appropriate extinguishing media.

# **Specific Hazards Arising from the Chemical**

Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.

# Advice for firefighters

In case of fire in the surroundings, use appropriate extinguishing media.

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder.

Chemical Book

Then store and dispose of according to local regulations.

# **Environmental precautions**

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

## Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# SECTION 7: Handling and storage

# Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## Conditions for safe storage, including any incompatibilities

Separated from food and feedstuffs and incompatible materials. See Chemical Dangers.

# SECTION 8: Exposure controls/personal protection

## **Control parameters**

# Occupational Exposure limit values

TLV: 0.05 mg/m3, as TWA; A3 (confirmed animal carcinogen with unknown relevance to humans).MAK: carcinogen category: 2; germ cell mutagen group: 3A.EU-OEL: (binding): 0.15 mg/m3 as TWA

#### **Biological limit values**

no data available

#### **Exposure controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area

# Individual protection measures

#### Eye/face protection

Wear safety spectacles.

# Skin protection

Protective gloves.

## Respiratory protection

Use local exhaust or breathing protection.

# Thermal hazards

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Physical state	Powder
Colour	White
Odour	no data available
Melting point/freezing point	ca. 400°C (decomposes)
Boiling point or initial boiling point and	333.6°C at 760mmHg
boiling range	
Flammability	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Lower and upper explosion	no data available
limit/flammability limit	
Flash point	169.8°C
Auto-ignition temperature	no data available
Decomposition temperature	315°C
рН	5.8 (50g/l, H2O, 20°ℂ)(slurry)
Kinematic viscosity	no data available
Solubility	Sol in acids and alkalies; insoluble in alcohol and ammonia
Partition coefficient n-octanol/water	no data available
Vapour pressure	no data available
Density and/or relative density	6.582 g/cu cm
Relative vapour density	no data available
Particle characteristics	no data available

# SECTION 10: Stability and reactivity

# Reactivity

Decomposes at 315°C. This produces toxic fumes of lead oxide. Reacts violently with fluorine. This generates fire hazard.

# **Chemical stability**

no data available

# Possibility of hazardous reactions

Ignites spontaneously and burns fiercely in fluorine.

# Conditions to avoid

no data available

# Incompatible materials

Burns fiercely in fluorine.

# Hazardous decomposition products

Lead carbonate decomposes at 315 deg C. From table

# **SECTION 11: Toxicological information**

# **Acute toxicity**

• Oral: no data available

Inhalation: no data availableDermal: no data available

# Skin corrosion/irritation

no data available

## Serious eye damage/irritation

no data available

# Respiratory or skin sensitization

no data available

# Germ cell mutagenicity

no data available

# Carcinogenicity

Lead, lead compounds: Reasonably anticipated to be a human carcinogen

# Reproductive toxicity

no data available

## STOT-single exposure

no data available

# STOT-repeated exposure

The substance may have effects on the blood, bone marrow, central nervous system, peripheral nervous system and kidneys. This may result in anaemia, haemolysis, encephalopathy (for example, convulsions), peripheral nerve disease and kidney impairment. Causes toxicity to human reproduction or development.

## **Aspiration hazard**

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed, especially if powdered.

# SECTION 12: Ecological information

# **Toxicity**

Toxicity to fish: LC50; Species: Pimephales promelas (Fathead minnow, <24 hr neonate); Conditions: freshwater, static, pH 7.5-9.1;

Concentration: > 5000000 ug/L for 96 hr /100% purity finely ground

Toxicity to daphnia and other aquatic invertebrates: LC50; Species: Daphnia magna (Water flea, <24 hr neonate); Conditions: freshwater,

static, pH 7.5-9.1; Concentration: >10000000 ug/L for 48 hr /100% purity finely ground

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

## Persistence and degradability

no data available

## Bioaccumulative potential

no data available

## Mobility in soil

no data available

#### Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

## Disposal methods

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

# Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: Transport information**

# **UN Number**

ADR/RID: UN3077 (For reference only, please check.)

IMDG: UN3077 (For reference only, please check.) IATA: UN3077 (For reference only, please check.)

## **UN Proper Shipping Name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)

## Transport hazard class(es)

ADR/RID: 9 (For reference only, please check.)

IMDG: 9 (For reference only, please check.)

IATA: 9 (For reference only, please check.)

# Packing group, if applicable

ADR/RID: III (For reference only, please check.)

IMDG: III (For reference only, please check.)

IATA: III (For reference only, please check.)

#### **Environmental hazards**

ADR/RID: Yes

IMDG: Yes

## Special precautions for user

no data available

# Transport in bulk according to IMO instruments

no data available

# SECTION 15: Regulatory information

# Safety, health and environmental regulations specific for the product in question

**European Inventory of Existing Commercial Chemical Substances (EINECS)** 

Listed.

**EC Inventory** 

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Listed.

China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

**PICCS** 

Listed.

**Vietnam National Chemical Inventory** 

Listed.

**IECSC** 

Listed.

Korea Existing Chemicals List (KECL)

Listed.

# SECTION 16: Other information

#### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

## References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

#### Other Information

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home.

#### Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.