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Safety Data Sheet

Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:
Product name: Lead(II) chloride
SDS No. : 4404E-5
Relevant identified uses of the substance or mixture and uses advised against
Research and Development
Details of the supplier of the safety data sheet
Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN
Division: Chemical Safety Management Department
Telephone number: +81-6-6946-8061
FAX: +81-6-6946-1607

Section 2. Hazards identification

GHS classification and label elements of the product
Classification of the substance or mixture
HEALTH HAZARDS
Acute toxicity (Oral): Category 4
Serious eye damage/eye irritation: Category 1
Carcinogenicity: Category 2
Reproductive toxicity: Category 1A
Specific target organ toxicity - single exposure: Category 1 (blood system, nervous system, kidneys)
Specific target organ toxicity - repeated exposure: Category 1 (blood system, nervous system, kidneys)
ENVIRONMENT HAZARDS
Hazardous to the aquatic environment, short-term (acute): Category 1
Hazardous to the aquatic environment, long-term (chronic): Category 1
(Note) GHS classification without description: Not classified/Classification not possible
Label elements

Signal word: Danger
HAZARD STATEMENT
H302 Harmful if swallowed
H318 Causes serious eye damage
H351 Suspected of causing cancer
H360 May damage fertility or the unborn child
H370 Causes damage to organs (blood system, nervous system, kidneys)
H372 Causes damage to organs through prolonged or repeated exposure (blood system, nervous system, kidneys)
H410 Very toxic to aquatic life with long lasting effects
PRECAUTIONARY STATEMENT

Prevention
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash contaminated parts thoroughly after handling.
P280 Wear eye protection/face protection.
P280 Use personal protective equipment as required.
P270 Do not eat, drink or smoke when using this product.
Response
P391 Collect spillage.
P314 Get medical advice/attention if you feel unwell.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor/physician.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 IF SWALLOWED: Rinse mouth.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Storage
P405 Store locked up.
Disposal
P501 Dispose of contents/container in accordance with local/national regulation.
Specific adverse human health effects
See "11. Toxicological Information".

Section 3. Composition/information on ingredients

Mixture/Substance selection:
Substance

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
Lead(II) chloride	98(min)	7758-95-4	1-252	PbCl2

Note : The figures shown above are not the specifications of the product.

Section 4. First-aid measures

Descriptions of first-aid measures
General measures
Get medical advice/attention if you feel unwell.
IF INHALED
Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
IF ON SKIN
Take off immediately all contaminated clothing. Rinse skin with water or shower.
If skin irritation or rash occurs: Get medical advice/attention.
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 SWALLOWED

Rinse mouth.

Call a POISON CENTER/doctor/physician if you feel unwell.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

Section 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

Section 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.
Avoid contact with eyes.

Safety Measures

Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands et al thoroughly after handling.
When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity".

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.

Storage

Conditions for safe storage

Keep container tightly closed.
Store locked up. (P405)
Store in a cool, dry place. Do not store in direct sunlight.
Storage in accordance with local/national regulation.

Container and packaging materials for safe handling

Use closed unbreakable containers.

Section 8. Exposure controls/personal protection

Control parameters

Control value and Concentration standard value

Japan control value 0.05mg-Pb/m3

Adopted value

JSOH(2016) 0.03mg-Pb/m3
ACGIH(1995) TWA: 0.05mg-Pb/m3 (CNS & PNS impair; hematologic eff)

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.
Eye wash station should be available.
Washing facilities should be available.

Individual protection measures

Recommend to use protective equipment in conformity with the standards.
Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystalline powder or powder
Color: White
Odor data is not available.
Melting point/Freezing point: 501℃
Boiling point or initial boiling point data is not available.
Boiling range data is not available.
Flammability (gases, liquids and solids) data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Flash point data is not available.
Auto-ignition temperature data is not available.
Decomposition temperature data is not available.
pH data is not available.
Kinematic viscosity data is not available.
Solubility:
Solubility in water: Insoluble
Solubility in solvent data is not available.
n-Octanol/water partition coefficient data is not available.
Vapor pressure data is not available.
Density and/or relative density: 5.9
Relative vapor density (Air=1) data is not available.
Particle characteristics data is not available.
Other information
Other information is not available.

Section 10. Stability and Reactivity

Reactivity
Not available.
Chemical stability
Stable under normal storage/handling conditions.
Possibility of hazardous reactions
Not available.
Conditions to avoid
Contact with fire source.
Incompatible materials
Not available.
Hazardous decomposition products
Chlorine compounds, Lead compounds

Section 11. Toxicological Information

Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[Product]
Category 4, Harmful if swallowed
[Data for components of the product]
[GHS Cat. Japan, base data]
guinea pig LD50=2000mg/kg (IARC 23, 1980)
Irritant properties

Skin corrosion/irritation data is not available.
Serious eye damage/irritation
[Product]
Category 1, Causes serious eye damage
[Data for components of the product]
[GHS Cat. Japan, base data]
rabbit moderate purulent reaction (HSDB, 2006)
Allergenic and sensitizing effects data is not available.
Mutagenic effects data is not available.
Carcinogenicity
[Product]
Category 2, Suspected of causing cancer
[Data for components of the product]
[GHS Cat. Japan, base data]
cat.2; IARC Gr. 2B (IARC, 1987 et al.)
[IARC]
Group 2A : Probably carcinogenic to humans
[ACGIH]
A3(as Pb)(1995) : Confirmed Animal Carcinogen with Unknown Relevance to Humans
Reproductive toxicity
[Product]
Category 1A, May damage fertility or the unborn child
[Data for components of the product]
[GHS Cat. Japan, base data]
cat. 1A; developmental neurotoxic and reproductive toxic potentials (lead)
Specific target organ toxicity (STOT)
STOT-single exposure
[Product]
Category 1, Causes damage to organs
[Data for components of the product]
[cat.1]
[GHS Cat. Japan, base data]
blood system, nervous system, kidneys (CERI hazard data book, 2002)
STOT-repeated exposure
[Product]
Category 1, Causes damage to organs through prolonged or repeated exposure
[Data for components of the product]
[cat.1]
[GHS Cat. Japan, base data]
blood system, nervous system, kidneys (CERI hazard data book, 2002)
Aspiration hazard data is not available.
Information on other hazards
May cause lung disorders by massive inhalation of powdered substance.
-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

Section 12. Ecological Information

Toxicity
Aquatic toxicity

[Product]
Category 1, Very toxic to aquatic life
Category 1, Very toxic to aquatic life with long lasting effects
[Data for components of the product]
Hazardous to the aquatic environment, short-term (acute)
[GHS Cat. Japan, base data]
Crustacea (Ceriodaphnia reticulata) LC50=0.28mg/L/48hr (ECETOC, 2003)

Persistence and degradability
Persistence and degradability data is not available.

Bioaccumulative potential
Bioaccumulative potential data is not available.

Mobility in soil
Mobility in soil data is not available.

Other adverse effects
Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods
Avoid release to the environment.
Dispose of contents/container as industrial waste. Accordance with local/national regulation.

Section 14. Transport Information

UN Number or ID Number : 3077
UN Proper Shipping Name :
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class or division (Transport hazard class) : 9
Packing group : III
ERG GUIDE No.: 171

IMDG Code (International Maritime Dangerous Goods Regulations)
UN Number or ID Number : 3077
UN Proper Shipping Name :
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class or division (Transport hazard class) : 9
Packing group : III

IATA (Dangerous Goods Regulations)
UN Number or ID Number : 3077
UN Proper Shipping Name :
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
Class or division (Transport hazard class) : 9
Hazard labels : Miscellaneous & Environmentally hazardous
Packing group : III

Environmental hazards
Marine pollutants (yes/no) : yes

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Applicable

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

Section 16. Other information

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN
IMDG Code, 2022 Edition (Incorporating Amendment 41-22)
IATA Dangerous Goods Regulations (65th Edition) 2024
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2024 TLVs and BEIs. (ACGIH)
JIS Z 7252 : 2019
JIS Z 7253 : 2019
2023 Recommendation on TLVs (JSOH)
Supplier's data/information

General Disclaimer

Please provide SDS to customers for selling or transferring.
All chemicals have unknown hazard. Handle the product with care.
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on current Japan official data (NITE published in 2022).