

Safety Data Sheet

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

Product identifier:

Product name: Lead(II) fluoride

Product code(SDS NO): 64155jis_J_E1-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division: Quality Assurance Department

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS

Serious eye damage/eye irritation: Category 2A

Carcinogenicity: Category 1B

Reproductive toxicity: Category 1A

Specific target organ toxicity – single exposure: Category 1(central nervous system, blood, kidney),

Specific target organ toxicity – single exposure: Respiratory tract irritation Category 3

Specific target organ toxicity – repeated exposure: Category 1(bone, central nervous system, blood, kidney)

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

Causes serious eye irritation

May cause cancer

May damage fertility or the unborn child

Causes damage to organs after single exposure

May cause respiratory irritation

Causes damage to organs through prolonged or repeated exposure

PRECAUTIONARY STATEMENT

Prevention

Do not handle until all safety precautions have been read and understood.

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

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear eye protection/face protection.

Use personal protective equipment as required.

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

Response

Get medical advice/attention if you feel unwell.

Lead(II) fluoride ,JUNSEI CHEMICAL CO., LTD.,64155jis_J_E1-1,27/09/2016

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

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.

Storage

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

Store locked up.

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Substance/Mixture:

Substance

Ingredient name:Lead (II) fluoride

Content(%):97.0 <

Chemical formula:F2Pb

Chemicals No, Japan:1-337

CAS No.:7783-46-2

MW:245.19

ECNO:231-998-8

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

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

IF ON SKIN(or hair)

Take off immediately all contaminated clothing. Rinse skin with water/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 or doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

The product is non-flammable.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

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

Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire/flare resistant/retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

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.

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 & explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

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

Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection

Control parameters

Control value

Japan control value (2004) $\leq 0.05\text{mg-Pb/m}^3$

Adopted value

JSOH(1982) 0.1mg-Pb/m^3

ACGIH(1991) TWA: 0.05mg-Pb/m^3 (CNS & PNS imp; 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

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Safety and Health measures

Wash ... thoroughly after handling.

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Crystals or crystalline powder

Color: Colorless~White

Odor: None

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point: 1293°C

Melting point/Freezing point: 830°C

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density: 8.2g/cm³(20°C)

Solubility

Solubility in water: 0.65g/L (20°C)

n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

Chemical stability

Stable under normal storage/handling conditions.

Conditions to avoid

Contact with incompatible materials.

Heat.

Incompatible materials

Oxidizing agents, calcium carbide, Alkali metals, Fluorines.

Hazardous decomposition products

Fluorides, Lead compounds.

11. Toxicological Information

Information on toxicological effects

Acute toxicity**Acute toxicity (Oral)**

[GHS Cat. Japan, base data]

rat LD50 = 3031 mg/kg (HSDB, 2003)

Labor standard law, Japan; Toxic

Lead (II) fluoride

Irritant properties**Skin corrosion/irritation**

[GHS Cat. Japan, base data]

human : mild irritating (HSDB, 2003; SITTIG, 2002)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

human : eye irritating (HSDB, 2003; SITTIG, 2002)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

Carcinogenicity

[GHS Cat. Japan, base data]

IARC-Gr.2A : Probably carcinogenic to humans

ACGIH-A3(1991) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

JSOH-2B: Insufficient Evidence of Carcinogenicity for Humans

Reproductive toxicity

[GHS Cat. Japan, base data]

cat.1A; ACGIH, 2004

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT**STOT-single exposure**

[cat.1]

[Japan published data]

CNS; blood/blood system; kidney (ACGIH, 2005)

[cat.3(resp. irrit.)]

[Japan published data]

Respiratory tract irritation (ACGIH, 2005)

STOT-repeated exposure

[cat.1]

[Japan published data]

bone; CNS; blood/blood system; kidney (ACGIH, 2005)

No Aspiration hazard data available

12. Ecological Information**Toxicity**

No Aquatic toxicity data available

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal considerations**Waste treatment methods**

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN number: 3288

Lead(II) fluoride ,JUNSEI CHEMICAL CO., LTD.,64155jis_J_E1-1,27/09/2016

UN proper shipping name:TOXIC SOLID, INORGANIC, N.O.S.

Transport hazard class(es): 6.1

Packing group: III

ERG GUIDE NO.: 151

15. Regulatory Information

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

US major regulations

TSCA

Lead (II) fluoride

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

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

16. Other information

GHS classification and labelling

Eye Irrit. 2: H319 Causes serious eye irritation

Carc. 1B: H350 May cause cancer

Repr. 1A: H360 May damage fertility or the unborn child

STOT SE 1: H370 Causes damage to organs after single exposure

STOT SE 3: H335 May cause respiratory irritation

STOT RE 1: H372 Causes damage to organs through prolonged or repeated exposure

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)

2016 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>

GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013,METI)

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

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 2015).