

CANON OPTRON INC.
 SDS Number: EL01
 Product Name: LaF3

SAFETY DATA SHEET

rev. 7.0 Date of Issue 2016/2/17
 Revised Date 2022/5/13

SECTION 1 Chemicals and company identification

Product name	LaF3
Product code	EL01
Company name	CANON OPTRON INC.
Address	1744-1, Kanakubo, Yuki-shi, Ibaraki-ken, 307-0015 Japan
Section name	Sales Department
Telephone number	+81-296-21-3700
Fax number	+81-296-21-3770
Emergency telephone number	+81-296-21-3700
Use	Vacuum deposition material

SECTION 2 Hazards identification

GHS Classification (A classification by JIS Z 7252 "classification methods such as chemical substances based on GHS")

No data available

Label element

hazard Pictograms	No data available
Signal word	No data available
Dangerous goods hazard information	No data available
Precautionary statement	

【Safety measures】

Obtain special instructions before use.
 Wash hands thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Do not breathe dust/fume/gas/mist/vapours/spray.

【First-aid measures】

If swallowed:

Call a poison center or doctor/physician if you feel unwell.
 Rinse mouth.

If in eyes:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call poison center or doctor/physician

【Storage】

Store in a well-ventilated place, keep container tightly closed.
 Store locked up.

【Disposal】

Dispose of contents/container in accordance with national regulations.

【Other hazards】

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SECTION 3 Composition/information on ingredients

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Substance/Mixture	Substance
Chemical name	<i>Lanthanum fluoride</i>
Chemical formula	<i>LaF3</i>
Concentration or concentration range	99.9%<
CAS No.	13709-38-1
TSCA Inventory	<i>Lanthanum fluoride (LaF3)</i>
EINECS number	<i>237-252-8</i>
Radioactive information	Radioactive substances are not used as the material. Therefore, there is no reason that ionizing radiation would be generated.

SECTION 4 First aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse affected areas with water/shower. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: : Get medical advice/attention.
Eye contact	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.
Ingestion	Rinse mouth. Get medical advice/attention.
Most important symptoms and effects, both acute and delayed	No data available
Protection of first aiders	Rescuers, wear suitable protective equipment as the situation demands.
Special precautions for physicians	No data available

SECTION 5 Firefighting measures

Suitable extinguishing media	This product itself is not flammable.
Unsuitable extinguishing media	No data available
Specific hazards	No data available
Specific extinguishing methods	In the case of a fire in the periphery, the portable container is quickly moved to a safe place.
Special protective equipment for firefighters	Wear suitable protective equipment (gloves, glasses and a mask) in fire-fighting.

SECTION 6 Accidental release measures

Personal precautions, protective equipment, and emergency procedures	Protection equipment (specified as those in which the properties of the product are suitable) worn during operation so that airborne droplets, etc., do not adhere to the skin and dusts and gases are not absorbed.
Environmental precautions	The leakage may not directly flow into rivers or sewage.

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Methods and material for
containment and cleaning up

The leaked material is scooped up, or swept up and gathered to be recovered in a paper bag or a drum.
After recovery, a small amount of the residue is absorbed in sediment, sawdust, etc.

Secondary disaster prevention
measures

No data available

SECTION 7 Handling and storage

Precautions for safe handling

Technical measures

Take measures for equipment as described in "8. Exposure controls/personal protection" and wear protective equipment.

Safety handling precautions

Handling work must be practiced in a room where there is a local or total ventilation facility.

Avoidance of contact

Refer to "10. Stability and reactivity."

Hygiene measures

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

Conditions for safe storage,
including any incompatibilities

Safe storage conditions

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

Safety packaging material

No data available

SECTION 8 Exposure controls/personal protection

LaF3

Permissible concentration

ACGIH

TWA 2.5 mg/m³ (As F) (2009 version)

Appropriate engineering controls

Use sealed devices, equipment, or a local exhaust ventilation as much as possible.

Individual protection measures,
such as personal protective
equipment

Respiratory protection

Dustproof mask

Hand protection

Protective gloves

Eye/face protection

Dust-proof glasses

Skin protection

Protective clothing

SECTION 9 Physical and chemical properties

Appearance

Physical state

Solid

Form

Pellets, granular

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Colour White

Odour None

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Melting point/freezing point	1493°C
Boiling point or initial boiling point and boiling range	Analysis
Flammability	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Kinematic viscosity	No data available
Solubility	
Water	Insoluble
Other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Vapour pressure	No data available
Density and/or relative density (Density)	5.93
Relative vapor density	No data available
Particle characteristics	No data available
Other information	No data available

SECTION 10 Stability and reactivity

LaF3

Reactivity	No data available
Chemical stability	Stable under normal handling and storage conditions.
Possibility of hazardous reactions	Generates toxic hydrogen fluoride gases when heated in the atmosphere or when reacted with acid.
Conditions to avoid	High temperature and humidity
Incompatible materials	Oxidants, strong acids
Hazardous decomposition products	Generates toxic hydrogen fluoride due to heating or reaction with acids.

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SECTION 11 Toxicological information

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Acute toxicity(oral)	<i>May react with stomach acids if swallowed in large amounts.</i>
Acute toxicity(dermal)	<i>No data available</i>
Acute toxicity (Inhalation: Gases)	<i>No data available</i>
Acute toxicity (Inhalation: Vapours)	<i>No data available</i>
Acute toxicity (Inhalation: Dusts and mists)	<i>No data available</i>
Skin corrosion/irritation	<i>Necessary to take precautions for skin with scratches.</i>
Serious eye damage/irritation	<i>Causes strong irritation to the conjunctiva.</i>
Respiratory or skin sensitization	<i>May cause pneumoconiosis if inhaled in large amounts over a long period of time.</i>
Germ cell mutagenicity	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Reproductive toxicity	<i>No data available</i>
Specific target organ toxicity(single exposure)	<i>No data available</i>
Specific target organ toxicity(repeated exposure)	<i>No data available</i>
Aspiration hazard	<i>No data available</i>
Other information	<i>No data available</i>

SECTION 12 Ecological information

LaF3

<p>Toxicity</p> <p>Hazardous to the aquatic environment Short-term(acute)</p> <p>Hazardous to the aquatic environment Long-term(chronic)</p>	<p><i>No data available</i></p> <p><i>No data available</i></p>
Persistence and degradability	<i>No data available</i>
Bioaccumulative potential	<i>No data available</i>
Mobility in soil	<i>No data available</i>
Hazard to the ozone layer	<i>No data available</i>
Other adverse effects	<i>No data available</i>

SECTION 13 Disposal considerations

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Waste treatment methods	Process is contracted to industrial waste disposers who received approval of a prefectural governor.
Contaminated container and contaminated packaging	The container is recycled after being cleaned, or is appropriately processed according to the standards of related laws and regulations. When disposing of empty containers, the contents should be completely removed.

SECTION 14 Transport information

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International regulation

UN number	<i>Not applicable</i>
UN proper shipping name	<i>Not applicable</i>
UN classification	<i>Not applicable</i>
Transport hazard class	<i>Not applicable</i>
Packing group	<i>Not applicable</i>
Hazardous to the aquatic environment	<i>No data available</i>
Maritime transport in bulk according to IMO instruments	<i>No data available</i>
Japanese laws and regulations	<i>No data available</i>
Special precautions for users	<i>No data available</i>
Special Provisions	-

SECTION 15 Regulatory information (Japan)

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Occupational Safety and Health Law	<i>No data available</i>
PRTR Law	<i>No data available</i>
Poisonous and Deleterious Substances control Law	<i>No data available</i>
Labor Standards Act	<i>No data available</i>
Chemical substances control Law	<i>No data available</i>
Fire fighting Law	<i>No data available</i>
Air Pollution Control Act	<i>No data available</i>
Water Pollution Prevention Act	<i>No data available</i>
Water Supply Act	<i>No data available</i>
Sewerage Act	<i>No data available</i>
Marine Pollution Prevention Law	<i>No data available</i>

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Cleansing Act*No data available*

Note

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

SECTION 16 Other information

The Safety Data Sheet (SDS) has been prepared based on currently available materials, information and data, and may be revised based on new information. Further, the important points in the SDS are made for the purpose of normal handling. When handling the user product in a specialized manner, take the appropriate safety measures for the application or method. Further, Canon Optron Inc. has paid sufficient attention to the described contents of the SDS, but does not guarantee the accuracy of its contents.

Literature Reference

[WEB site]

National Institute of Technology and Evaluation Homepage
Japan Advanced Information Center of Safety and Health Homepage
Ministry of Health, Labour and Welfare Homepage

[Regulatory review Tools]

ezCRIC (Japan Chemical Database Ltd)