CANON OPTRON INC.
SDS Number: EO29
Product Name: OH－14

SAFETY DATA SHEET

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SECTION 1 Chemicals and company identification

Chemical idetifier	OH－14
SDS number	EO29
Company name	CANON OPTRON INC.
Address	1744-1, Kanakubo, Yuki-shi, Ibaraki-ken, 307-0015 Japan
Section name	Internal Control Promotion Div.
Telephone number	+81-296-21-3700 (Sales Dept.)
Fax number	+81-296-21-3770
Emergency telephone tumber	+81-296-21-3700 (Sales Dept.)
Recommended uses and restrictions on 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"）

Physicochemical hazard	Explosives	Classification not possible
	Flammable gases(including chemically unstable gases)	Not applicable
	Aerosols	Not applicable
	Oxidizing gases	Not applicable
	Gases under pressure	Not applicable
	Flammable liquids	Not applicable
	Flammable solids	Classification not possible
	Self-reactive substances and mixtures	Classification not possible
	Pyrophoric liquids	Not applicable
	Pyrophoric solids	Classification not possible
	Self-heating substances and mixtures	Classification not possible
	Substances and mixtures which,in contact with water,emit Flammable gases	Classification not possible
	Oxidizing liquids	Not applicable
	Oxidizing solids	Classification not possible
	Organic peroxides	Classification not possible
	Corrosive to metals	Classification not possible
Health hazard	Acute toxicity(oral)	Classification not possible
	Acute toxicity(dermal)	Classification not possible
	Acute toxicity(inhalation)	Classification not possible
	Skin corrosion/irritation	Classification not possible

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	Eye damage/eye irritation	Classification not possible
	Respiratory sensitization	Classification not possible
	Skin sensitization	Classification not possible
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Effects on or via lactation	Classification not possible
	Specific target organ toxicity(single exposure)	Classification not possible
	Specific target organ toxicity(repeated exposure)	Category 2
	Aspiration hazard	Classification not possible
Environmental hazard	Hazard to the aquatic environment(acute hazard)	Classification not possible
	Hazard to the aquatic environment(long-term hazard)	Classification not possible
	Hazard to the ozone layer	Classification not possible

Label element

Pictogram（Symbol） Health Hazard

Signal word	Warning
Hazard statement	May cause damage to organs through prolonged or repeated exposure.
Precautionary statement	
【Safety measures】	Do not breathe dust/fume/gas/mist/vapours/spray.
【First-aid measures】	Get medical advice/attention if you feel unwell.
【Storage】	－
【Disposal】	Dispose of contents/container in accordance with national regulations.

SECTION 3 Composition and information ingredients

Substance/Mixture Mixture

Chemical name or generic name		
	Dilanthanum dititanium heptaoxide	*Aluminium oxide*

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Chemical formula	*La2Ti2O7*	*Al2O3*
CAS No.	*12031-47-9*	*1344-28-1*
Concentration or concentration range	La2Ti2O7 : 95- 99 Al2O3 : 1- 5	
TSCA Inventry	*Lanthanum titanium oxide (La2Ti2O7)*	*Aluminum oxide (Al2O3)*
EINECS number	*234-751-2*	*215-691-6*
Radioactive information	It does not use a radioactive substance as a material. Thus, evidence of ionizing radiation occurs is not present.	

SECTION 4 First-aid measures

Inhalation	It is possible to move to fresh air victim immediately and keep at rest in a position comfortable for breathing. If you feel bad, you should contact your doctor.
Skin	Take off all contaminated clothing immediately Remove /. I flush for 15 minutes or more with soap and plenty of water. If symptoms blisters and pain comes, get medical attention if necessary.
Eye	Be flush eyes for at least 15 minutes with clean water immediately. If you are using the contact lenses, as long as it is not fixed, it can be washed and removed. Be subject to medical attention without fail.
Ingestion	Rinse mouth immediately. Be subject to medical attention without fail.
Protection of first aiders	Rescuers Wear protective equipment protective eyewear, such as protective gloves.

SECTION 5 Fire-fighting measures

Extinguishing media	The product itself does not burn.
Extinguishing media are unsuitable	No data available
Specific hazards	No data available
Specific extinguishing methods	The movable container, and transferred to a safe place as soon as possible in case of surrounding fire.
Protection of fire-fighters	In fire fighting, I want to wear (gloves, glasses, mask) the appropriate protective equipment.

SECTION 6 Accidental release measures

Personal precautions,protective equipment,and emergencyprocedures	Wear it (which specify what suited the nature of the product) protective equipment, such as spray or on skin, we do not want to dust inhalation, the gas at the time of work.
Environmental precautions	Do not flowing in rivers and sewage directly spillage.
Methods and materials for containment and methods and materials for cleaning up	And collected in drums or paper bags are collected to wear or have rake those leaked. I to absorb in saw-dust or sediment residue content of the small amount of recovery after.

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Secondary disaster prevention measures: No data available

SECTION 7 Handling and storage precautions

Handling

Technical measures: I wear the appropriate protective equipment safety glasses, protective gloves, etc.. After handling Wash hands, face, etc., and gargle.

Safety handling precations: When handling, to handle in place with equipment for general ventilation or local exhaust under.

Storage

Safe storage conditions: Store tightly closed container in a well-ventilated place.

Safety packaging material: No data available

SECTION 8 Exposure controls and personal protection

	La2Ti2O7	***Al2O3***
Permissible concentration		
ACGIH	*No data available*	*(Particulate asbestos-free, less than 1% crystalline silica) TLV-TWA 10mg/m3 (2005 edition)*

Engineering controls: To use devices that are sealed as much as possible, local exhaust ventilation or equipment.

Personal protective equipment

Respiratory protection: Dust mask

Hand protection: Protective glove

Eye protection: Dust-proof glasses

Skin and body protection: Protective clothing

SECTION 9 Physical and chemical properties

Appearance

Physical state: Solid

Form: Granular

Colour: Dark gray

Odour: None

	La2Ti2O7	***Al2O3***
pH	*No data available*	*No data available*
Melting point/Freezing point	*About 1800 ℃*	*2072℃*
Boiling point/Initial boiling point and boiling range	*No data available*	*2980℃*

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Flash point	*No data available*	*Noncombustibility*
Evaporation rate	*No data available*	*Not applicable*
Flammability (solid, gas)	*No data available*	*Noncombustibility*
Explosive limits		
LEL	*Not applicable*	*No data available*
UEL	*Not applicable*	*No data available*
Vapour pressure	*No data available*	*0.073Pa (mp.)*
Vapour density (air = 1)	*No data available*	*No data available*
Specific gravity (Relative density)	*5.9*	*3.97*
(Density)		
Solubility		
Water	*No data available*	*Insoluble*
Other solvents	*No data available*	*The slightly soluble in non-polar organic solvent*
n-octanol/Water partition coefficient	*No data available*	*No data available*
Auto-ignition temperature	*No data available*	*Noncombustibility*
Decomposition temperature	*No data available*	*No data available*
Viscosity (Coeffiient of viscosity)	*No data available*	*No data available*
Other data	*None*	*None*

SECTION 10 Stability and reactivity

	La2Ti2O7	***Al2O3***
Reactivity	*No data available*	*No data available*
Chemical stability	*It is stable in storage conditions and normal handling.*	*Stability*
Hazardous reactions	*No data available*	*Almost no*
Conditions to avoid	*No data available*	*Generation of dust, diffusion.*
Incompatible materials	*No data available*	*None*
Hazardous decomposition products	*No data available*	*None*

SECTION 11 Hazard information

	La2Ti2O7	***Al2O3***
Acute toxicity(oral)	*No data available*	*Oral Rat LD50> 5000mg/kg*
Acute toxicity(dermal)	*No data available*	*No data available*
Acute toxicity(inhalation)	*No data available*	*Mouse LD50:> 3,600 mg / kg (ip)*
Skin corrosion/irritation	*No data available*	*No data available*

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Eye damage/eye irritation	*No data available*	*No data available*
Respiratory sensitization/Skin sensitization	*No data available*	*No data available*
Germ cell mutagenicity	*No data available*	*Was mutagenicity test has not been carried out, even in the mutagenicity test Ames test is only the (negative), and can not be classified by the lack of data.* *Was mutagenicity test has not been carried out, even in the mutagenicity test Ames test is only the (negative), and can not be classified by the lack of data.*
Carcinogenicity	*No data available*	*ACGIH are classified into (a substance that can not be classified as a human carcinogen) group A4.*
Reproductive toxicity	*No data available*	*No data available*
Specific target organ toxicity(single exposure)	*No data available*	*May cause respiratory irritation*
Specific target organ toxicity(repeated exposure)	*No data available*	*TLV-TWA 10mg/m3(An asbestos non-implication, the fine particles of under crystal silica 1%)* *(A 2005 version)*
Aspiration hazard	*No data available*	*TLV-TWA 10mg/m3(An asbestos non-implication, the fine particles of under crystal silica 1%)* *(A 2005 version)*
Others	None	

SECTION 12 Ecological information

	La2Ti2O7	***Al2O3***
Ecotoxicity		
Fish	*No data available*	*No data available*
Crustaceantoxicity(singleexposure)	*No data available*	*No data available*
Algae	*No data available*	*No data available*
Other organisms	*No data available*	*No data available*
Persistence and degradablility	*No data available*	*No data available*
Bioaccumulative potential	*No data available*	*No data available*
Mobility in soil	*No data available*	*No data available*
Hazard to the ozone layer	*No data available*	*No data available*
Others	*No data available*	*No data available*

SECTION 13 Notes on disposal

Waste from residues: Entrust the process to industrial waste disposal contractor has received a license from the governor.

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Contaminated container and contaminated packaging	Recycle or in the clean container and take appropriate disposal in accordance with the criteria of the relevant legislation sequence municipality.

SECTION 14 Transport information

	La2Ti2O7	***Al2O3***
International regulation		
UN classification	*Not applicable*	*Not applicable*
UN number	*None*	*None*
UN proper shipping name	*None*	*None*
Packing group	*Not applicable*	*Not applicable*
Japanese lows and regulations	*None*	*No land Regulatory Information Regulatory Maritime regulatory information non-hazardous materials Aviation regulatory information non-hazardous materials*
Conditions and specific safety measures of transport	*No data available*	*During transport, the loading container is broken or corroded, so that there is no leak, and to reliably prevent the collapse of cargo.*

SECTION 15 Regulatoly information（Japan）

	La2Ti2O7	***Al2O3***
PRTR Law	*No data available*	*None*
Occupational Safety and Health Law	*No data available*	*There is it in the case of an application or an application*
Poisonous and Deleterious Substances control Law	*No data available*	*None*
Explosives control Law	*No data available*	*None*
High-pressure gas security Law	*No data available*	*None*
Fire fighting Law	*No data available*	*None*
Chemical substances control Law	*No data available*	*None*
Ship safety Law	*No data available*	*None*
Aviation Law	*No data available*	*None*
Prevention of marine pollution Law	*No data available*	*None*
Pneumoconiosis Law	*No data available*	*There is it in the case of an application or an application*

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

SECTION 16 Other information

SAFETY DATA SHEET

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

[References]
Industrial Safety and Health Act All Data of MSDS Target Substances: The Chemical Daily Co., Ltd (2003)
Poisonous and Deleterious Substances Control Act All Data of MSDS Target Substances: The Chemical Daily Co., Ltd (2003)
Pollutant Release and Transfer Register All Data of MSDS Target Substances: The Chemical Daily Co., Ltd (2003)
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