

SAFETY DATA SHEET

1. Chemical Product and Company Identification

ProductName Tb2O3 (Powder, Target, Code #:TBO02PB)

Reference NO. TBO02PAG-001 Creation Date 2025/12/01

Company information

Name

: Kojundo Chemical Laboratory Co.,Ltd.

Creation Date: 2025/12/01

Address : 5-1-28, Chiyoda, Sakado , Saitama, 350-0284, Japan

Name of Section : Quality Assurance Dept.

TEL : +81-49-284-1511

FAX : +81-49-284-1351

Product Use For research purposes

Restriction of use Seek expert judgment when using the product for applications other

than those recommended

2. Hazards identification

[GHS CLASSIFICATION]

PHYSICAL HAZARDS

Not Classification criteria.

HEALTH HAZARDS

Not Classification criteria. ENVIRONMENTAL HAZARDS Not Classification criteria.

[GHS LABEL ELEMENTS]

Pictogram : Not applicable
Signal Word : Not applicable
Hazard Statement : Not applicable

Precautionary Statement

Safety measures : Not applicable
First aid measures : Not applicable
Storage : Not applicable

Disposal: Not applicable

3. Composition/information on ingredients

Classification of the substance or mixture : Mixture

Chemical name	Concentration(%)	CAS RN®
Diterbium trioxide	100.00	12036-41-8

4. First aid measures

Inhalation : Remove the exposed person immediately and provide fresh air.

Get medical attention.

Skin contact : Promptly flush contaminated skin with soap or mild detergent and

water.

Contact Dermatologist if irritation continues.

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Eye contact

: Rinse cautiously with water for 15 minutes. Get medical attention

from an ophthalmologist.

When washing your eyes, hold your eyelids open with your fingers to allow water to reach every corner of your eyeballs and eyelids.

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Ingestion

: Rinse mouth and throat with water. Get medical attention

immediately.

Necessary precautions for protection of person performing first aid measures

: Rescue workers wear appropriate eye and skin protection equipment

according to the situation.

Special precautions for doctors

: The doctor should carry out treatment that corresponds to the

patient's symptoms.

5. Fire fighting measures

Suitable extinguishing media

: No information available

Unsuitable extinguishing media

: If there are overlapping items between "Suitable extinguishing media" and "Unsuitable extinguishing media", the use of that extinguishing media is prohibited.

Special protective equipment and precautions for fire-fighters

: Wear appropriate respiratory air and the protective clothing (heat

resistance).

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

: Remove all ignition sources.

: Workers should use protective wears to prevent contact with the

spilt adhesive and inhalation of its vapor/dusts.

Indoor leakage: Ventilate as much as possible until the cleaning is

completed.

Outdoor leakage: Work from the windward and evacuate the leeward

crowd.

Enviromental precautions

: Prevent flow out to river, etc. so as not to badly affect.

Methods and material for containment and cleaning up

: Shut off leak if without risk.

Avoid unnecessary contacts with spills.

: Gather up, pack in closed DOT-approved waste container as much

as possible.

Carefully collect remnant and move to a safe place.

Measures to prevent secondary

disasters

: Prevent leakage into sewer, rivers and etc., and take measures to

prevent environmental pollution.

7. Handling and storage

Handling

Technical measures : No information available Precautions for safe handling : No information available

Avoid contact

: Use protective wears and local ventilation equipment, if

inhalation or skin contact is foreseen. Avoid prolonged or repeated exposure.

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

Storage

Safe storage conditions : Store the material in a sealed container.

Store in a cool, dry, well ventilated and dark place away from

incompatible materials.

: Store molded products such as targets in an unopened

condition.

Safe container packaging

materials

: No information available

8. Exposure controls / Personal protection

Control parameters

Chemical name	ACGIH	OSHA
Diterbium trioxide	-	-

: Install the appropriate general ventilation equipment, local Equipment

exhaust ventilation in the workplace.

Personal protection

Respiratory protection : Wear appropriate NIOSH/MSHA-approved respirator.

Hand protection : Wear appropriate NIOSH/MSHA-approved impervious gloves.

Eye and face protection : Wear appropriate NIOSH/MSHA-approved safety goggles.

Skin and body protection : Wear appropriate NIOSH/MSHA-approved impervious

protective wear, protective boots.

Special precautions Regularly check your protective gear.

The notes for the table are as follows.

D: Dust, M: Mist, F: Fumes, I: Inhalable particles, R: Respirable particles, IFV: Inhalable particles and vapors, T:

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Total dust, V: Vapors, C: Ceiling limit

9. Physical and chemical properties

Physical state : Solid Color : Colorless

Odour : No information available

Melting point/Freezing point : 2410℃

Boiling point, initial boiling point and boiling range

: No information available

Flammability : Non-combustible

Range of explosion (lower bound - upper bound)

: No information available

Flash point : No information available Autoignition temperature : No information available : No information available Decomposition temperature : No information available Ηq

Kinematic viscosity : No information available

: Insoluble in water Solubility

Partition coefficient (n-

octanol/water)

: No information available

Vapor pressure : No information available

Density/Specific gravity : 7.91g/cm3

Relative vapor density : No information available Particle characteristics : No information available

Other : F.W. : 365.8

Oxidizing: None

10. Stability and reactivity

: No information available Reactivity Possibility of hazardous

reactions

: No information available

Conditions to avoid : Keep away from direct sunlight. Store in a cool, dark place.

Incompatible materials : No information available

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Hazardous decomposition products

: No information available

11. Toxicological information

Acute toxicity(oral)

No information available

Acute toxicity(dermal)

No information available

Acute toxicity(inhalation:gases)

No information available

Acute toxicity(inhalation:vapours)

No information available

Acute toxicity(inhalation:dusts and mists)

No information available

Skin corrosion/Skin irritation

No information available

Serious eye damage/Eye Irritation

No information available

Respiratory sensitizer

No information available

Skin sensitizer

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

No information available

Toxic to reproduction/Effects on or via lactation

No information available

Specific target organ toxicity(single exposure)

No information available

Specific target organ toxicity(repeated exposure)

No information available

Aspiration hazard

No information available

12. Ecological information

Hazard to the aquatic environment (acute)

No information available

Hazard to the aquatic environment (chronic)

No information available

Hazardous to the ozone layer

No information available

Ecotoxicity/Fish toxicity

No information available

Ecotoxicity/ Invertebrate toxicity

No information available

Ecotoxicity/ Algal toxicity

No information available

Persistence and degradability

No information available

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Bioaccumulative potential

No information available

Mobility in soil

No information available

13. Disposal considerations

Remained waste : Discard in accordance with the standards of the local government

and relevant legislation.

A polluted container and

packing

: When disposing of empty containers, empty containers are

processed in accordance with the standards of the local government as well as the related laws and regulations and waste disposal

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method after contents are completely removed.

14. Transport information

UN number : No information available

Guideline Number : -

Shipping name : No information available UN Class : No information available Packing group : No information available

Subsidiary risk(s) : -

MARINE POLLUTANT : Not applicable Transport in bulk according to : Not applicable

the IBC code

Special safety measures for transport or means of transport

MARPOL 73/78, Annex II, and

: Follow "7. Handling and storage"

: Check no leak of container, handle witout overturning, falling and

damaging, then reliably prevent from cargo shift.

Domestic regulations

Ground transport: Follow the transportation method specified in the Fire Service Law

and the Industrial Safety and Health Law.

Marine transport : Follow the transportation method specified in the Ship Safety Law.

Air transport : Follow the transportation method specified in the Aviation Law.

15. Regulatory information

Follow relavant national and local regulations.

16. Other information

This "Safety Data Sheet(SDS)" is for provision of information, and it does not represent a guarantee the properties or safeties of the product.

Since not all materials and literature have been investigated, information may be omitted, and changes may occur in the content due to the discovery of new findings or corrections of previous theories.

The information contained herein is based on information in our possession, but we do not guarantee the completeness of the information.

It is subject to revision based on changes in laws and regulations and new findings.

When using this information for important decisions, we recommend that you carefully review the source of the information or verify it through testing.

Values of ingredients, content, physicochemical properties, etc., are not quality assurance values.

Prior to use, please investigate the laws and regulations of the organization, area and country where the product is to be used.

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The information is intended to ordinary usage, in case of special handling, sufficient care should be taken. Special Notes (displayed only if applicable)