

14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-21

Print Date: 2024-01-26

# SECTION 1:Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Barium titanate
Product Number : B118840
Brand : aladdin
CAS-No. : 12047-27-7

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®, Outside the USA :

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, oral (category 4), H302

Acute toxicity, inhalation (category 4), H332

# 2.2 GHS Label elements, including precautionary statements

Pictogram

Warning

Signal word

H302+H332

Hazard statement(s)

Harmful if swallowed or if inhaled

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.



14078 Meridian Parkway, Riverside, CA. 92518

P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P501 Dispose of contents/container to an approved waste disposal plant.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing.Call

a POISON CENTER or doctor. if you feel unwell.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : titanate barium barium metatitanate barium titanate barium titanium

trioxide

Formula : BaO3Ti

Molecular weight : 233.21

CAS No. : 12047-27-7

EC-NO. : 234-975-0

Component	Classification	Concentration
Barium titanate		
	Acute toxicity category 4; H302, H332	nanopowder
		,99.9% trace
		metals basis,
		<100 nm

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

# 4.2 Most important symptoms and effects, both acute and delayed



14078 Meridian Parkway, Riverside, CA. 92518

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media

Use water mist, alcohol-resistant foam, dry powder or carbon dioxide to extinguish the fire.

Unsuitable extinguishing media

no data available

# 5.2 Special hazards arising from the substance or mixture

Titanium/Titanium Oxide Barium Oxide

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust generation. Avoid breathing vapor, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection, see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 6.4 Reference to other sections

For disposal see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid the formation of dust and aerosols. Where there is dust generation, provide suitable exhaust equipment. Operate in accordance with good industrial hygiene and safety regulations. Wash your



14078 Meridian Parkway, Riverside, CA. 92518

hands before breaks and at the end of work. For preventive measures, see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed and store in a dry and ventilated place. Sensitive to humidity

### 7.3 Specific end use(s)

no data available

# SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

# 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

**Body Protection** 

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the

dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type

ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face

supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU).

Control of environmental exposure

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.



14078 Meridian Parkway, Riverside, CA. 92518

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance form: Powder color: White to Off-White

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing point 1625°C

f) Initial boiling point and boiling range no data available g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available no data available k) Vapour pressure no data available I) Vapour density m) Relative density no data available n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available no data available q) Decomposition temperature no data available r) Viscosity s) Explosive properties N no data available t) Oxidizing properties N no data available

# 9.2 Other safety information

no data available

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

# 10.5 Incompatible materials

Strong oxidant, strong acid



14078 Meridian Parkway, Riverside, CA. 92518

# 10.6 Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

# **SECTION 12: Ecological information**

### 12.1 Toxicity

no data available

# 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available



14078 Meridian Parkway, Riverside, CA. 92518

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

no data available

#### **SECTION 13:**

# 13.1 Disposal considerations

Product

Hand over the remaining and non-recyclable solution to a licensed company for disposal. Dissolve or mix with flammable solvents, and burn in a chemical incinerator equipped with post-combustion and scrubbing functions Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

DOT (US)

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: Not dangerous Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

goods available available

Environmental Hazards: No

**IMDG** 

UN number: no data available Packing group: no data available EMS-No: no data available

Proper shipping name: Not dangerous goods

IATA

UN number: no data available Packing group: no data available Class: no data available

Proper shipping name: Not dangerous goods

### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **SECTION 16: Other information**

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

Email: QualityAssurance@aladdinsci.com

Creation Date22-Oct-2021Revision Date21-Jan-2024Print Date26-Jan-2024

Revision Summary SDS sections updated v1



14078 Meridian Parkway, Riverside, CA. 92518

#### Disclaimer

Copyright Aladdin Co. Ltd. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.