

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-22

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

1.1 Product identifiers

Product name : Tetrabutyl Orthotitanate Tetramer

Product Number : T304454

Brand : aladdin

CAS-No. : 70799-68-7

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)
CFR 1910.1200:Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 3]

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Hazard statement(s)

H226 Flammable liquid and vapor

H315 Causes skin irritation

H319 Causes serious eye irritation

Precautionary statement(s)



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P210	Keep away from heat, hot surface, sparks, open flames and other ignition	
	sources No smoking.	
P233	Keep container tightly closed.	
P240	Ground/bond container and receiving equipment.	
P241	Use explosion-proof [electrical/ventilating/lighting//] equipment.	
P242	Use only non-sparking tools.	
P243	Take precautionary measures against static discharge.	
P264	Wash hands [and] thoroughly after handling.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P302+P352	IF ON SKIN: wash with plenty of water.	
P303+P361+P353	IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN	
	with water [or shower].	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
	lenses if present and easy to do - continue rinsing.	

In case of fire: Use ... to extinguish.

Store in a well-ventilated place. Keep cool.

Take off contaminated clothing and wash it before reuse.

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

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

SECTION 3: Composition/information on ingredients 3.1 Substances

P362+P364

P370+P378

P403+P235

P501

Synonyms : Butyl Titanate Tetramer|Tetrabutoxy Titan Tetramer|Tetrabutyl Titanate

Tetramer|Titanium Butoxide Tetramer

Formula : C40H90O13Ti4

Molecular weight : 970.62 CAS No. : 70799-68-7 EC-NO. : no data available

Component	Classification	Concentration
Tetrabutyl Orthotitanate Tetramer		
	no data available	None

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice no data available



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If inhaled

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

In case of skin contact

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

In case of 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.

If swallowed

Get medical advice/attention if you feel unwell. Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

no data available

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

Dry chemical, foam, water spray, carbon dioxide.

Unsuitable extinguishing media

Solid streams of water

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus if possible.

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 extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions

Prevent product from entering drains.



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6.3 Methods and materials for containment and cleaning up

Absorb spilled material with dry sand or inert absorbent before recycling it into an airtight container. If there is a large amount of spillage, use seals to control the spillage. Adhered or aggregated materials shall be disposed of in a timely manner in accordance with local laws and regulations. Prevention of secondary hazards: remove all sources of ignition. In case of fire, fire extinguishing devices shall be prepared. Use spark proof tools and explosion-proof equipment.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. Conditions for safe storage, including any incompatibilities

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive

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

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Eye/face protection

Safety glasses. A face-shield, if the situation requires.

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection



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Protective gloves. Protective clothing. Protective boots, if the situation requires.

Respiratory protection

Vapor respirator. Follow local and national regulations.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance form: Clear Liquid color: Very pale yellow - Yellow

b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing point no data available
f) Initial boiling point and boiling range no data available
g) Flash point 50°C (122°F)
h) Evaporation rate no data available
i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available

m) Relative density 1.1

n) Water solubility no data available o) Partition coefficient: n-octanol/water no data available p) Auto-ignition temperature no data available q) Decomposition temperature no data available r) Viscosity no data available 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



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no data available

10.4 Conditions to avoid

Spark, Open flame, Static discharge

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon dioxide, Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

no data available

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

no data available

SECTION 12: Ecological information

12.1 Toxicity

no data available

12.2 Persistence and degradability



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no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.Other considerations: Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

DOT (US)

UN number: UN1993 Packing group: III Class: 3

Proper shipping name: Flammable Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

liquids, n.o.s available available

Environmental Hazards: no data available

IMDG

UN number: UN1993 Packing group: III EMS-No: EmS number: F-E, S-E

Proper shipping name: Flammable liquids, n.o.s

IATA

UN number: UN1993 Packing group: III Class: 3

Proper shipping name: Flammable liquids, n.o.s

SECTION 15: Regulatory information



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Toxic Substance Control Act

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list: (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec. (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet. US Federal Regulations

US Federal Regulations

SARA 313: Not Listed

SARA 302: Not Listed

State Regulations

Massachusetts Not Listed

New Jersey Not Listed

Pennsylvania Not Listed

Other Information

NFPA Rating: HMIS Classification: Health: 2 Health: 2 Flammability: 2 Flammability: 2 Instability: 0 Physical: 0

SECTION 16: Other information

Regulatory Affairs

Prepared By ALADDIN SCIENTIFIC CORPORATION

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