

Safety Data Sheet SNT7261

Issue date: 02/19/2015 Revision date: 03/14/2022 Version: 2.2

SECTION 1: Identification

1.1. Identification

Product name : TETRA-n-BUTYLTIN, 99%

Product code : SNT7261
Product form : Substance
Physical state : Liquid
Formula : C16H36Sn

Synonyms : TETRABUTYLSTANNANE

Chemical family : ORGANOTIN

1.2. Recommended use and restrictions on use

Recommended use : Chemical intermediate

1.3. Supplier

GELEST, INC.

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2 H315
Serious eye damage/eye irritation Category 2A H319
Hazardous to the aquatic environment – Acute H400

Hazard Category 1

Full text of H statements : see section 16

H315 Causes skin irritation

H319 Causes serious eye irritation

H400 Very toxic to aquatic life

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H400 - Very toxic to aquatic life

Precautionary statements (GHS US) : P280 - Wear protective gloves/protective clothing/eye protection.

P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment.

P302+P352 - If on skin: Wash with plenty of water.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

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P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention. P321 - Specific treatment (see first aid instructions on this label).

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P501 - Dispose of contents/container to licensed waste disposal facility...

2.3. Hazards not otherwise classified (HNOC)

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Multi-constituent

Name : TETRA-n-BUTYLTIN, 99%

CAS-No. : 1461-25-2

Name		Product identifier	%	GHS US classification
Tetra-n-butyltin	N.	CAS-No.: 1461-25-2	99 – 100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400
Other Organotins			0 – 1	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after skin contact

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical

advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

: Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Organotins may be absorbed through the skin.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Note to physician: Application of corticosteroid creams has been effective in treating severe skin irritation. If blisters develop, they may require abrasion to promote healing.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray to cool exposed surfaces.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid

all eye and skin contact and do not breathe vapor and mist.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or

shovel spills into appropriate container for disposal. Collect spillage.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in

process area to prevent accumulation of vapors.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap

and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials : Oxidizing agent. Direct sunlight.

Storage area : Store in a well-ventilated place. Store away from heat.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Organotins		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	0.1 mg/m³ as tin	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) [1]	0.1 mg/m³ as tin	
Tetra-n-butyltin (1461-25-2)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	0.1 mg/m³ (Tin)	

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Molecular mass : 347.15 g/mol
Color : Straw.
Odor : Mild.

Odor threshold : No data available pH : No data available

Relative evaporation rate (butyl acetate=1) : < 1

Melting point : No data available

Freezing point : -97 °C

Boiling point : 145 °C @ 10 mm Hg

Flash point : 107 °C

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : < 0.1 mm Hg @ 20°C

Relative vapor density at 20°C : > 1
Relative density : 1.057

Solubility : Insoluble in water.

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Partition coefficient n-octanol/water (Log Pow) : No data available Partition coefficient n-octanol/water (Log Kow) : No data available Viscosity, kinematic : 4.2 cSt @ 25°C Viscosity, dynamic : No data available Explosive properties : No data available Oxidizing properties : No data available Explosion limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Direct sunlight causes slow degradation to an inorganic tin salt.

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Oxidizing agent. Direct sunlight.

10.6. Hazardous decomposition products

Organic acid vapors. Tin oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tetra-n-butyltin (1461-25-2)

LD50 oral rat > 4000 mg/kg
Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Causes serious eye in Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Organotins may be absorbed through the skin.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms/effects after ingestion : May be harmful if swallowed.

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Reason for classification : Expert judgment

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life.

Tetra-n-butyltin (1461-25-2)		
LC50 - Fish [1]	0.0416 – 0.0492 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	1.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
EC50 72h - Algae [1]	0.036 mg/l (Species: Desmodesmus subspicatus)	
EC50 96h - Algae [1]	0.042 mg/l (Species: Desmodesmus subspicatus)	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the ozone layer : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility..

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
Transport document description			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable

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DOT	TDG	IMDG	IATA
¥2	¥2	¥2	¥27
Not applicable	Not applicable		
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available	ble	•	,

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Other Organotins		Not present	-	
Tetra-n-butyltin	1461-25-2	Present	Active	

15.2. International regulations

CANADA

Tetra-n-butyltin (1461-25-2)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Tetra-n-butyltin (1461-25-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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National regulations

Tetra-n-butyltin (1461-25-2)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Tetra-n-butyltin (1461-25-2)

U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

Full text of H-phrases::

H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

Abbreviations and acronyms

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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