

Safety Data Sheet per OSHA HazCom 2012

Page 1/5 Printing date 11/24/2015 Reviewed on 06/21/2012

1 Identification

Product identifier

Product name: Allenyltri-n-butyltin

Stock number: L20121

CAS Number: 53915-69-8 Index number: 050-008-00-3

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Details of the supplier of the safety da Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757 Email: tech@alfa.com www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.



GHS08 Health hazard

STOT RE 1 H372 Causes damage to the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Oral and Inhalative.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. **Hazards not otherwise classified** No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





Signal word Danger
Hazard statements
H300 Fatal if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H316 Causes serious eye irritation.
H372 Causes damage to the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Oral and Inhalative.
Precautionary statements
Do not breathe dust/fume/gas/mist/gapours/spray.

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Do not breathe dust/fume/gas/mist/vapours/spray.
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P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...
P305+P351+P338 |F IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P361 | Take off immediately all contaminated clothing.
P405 | Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

D1A - Very toxic material causing immediate and serious toxic effects D2A - Very toxic material causing other toxic effects



Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 3
Flammability = 1
Physical Hazard = 1

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

USA

Product name: Allenyltri-n-butyltin

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3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 53915-69-8 Allenyltri-n-butyltin Identification number(s): Index number: 050-008-00-3

4 First-aid measures

Description of first aid measures General information

Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

Seek Immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Do not induce vomiting; immediately call for medical help.

Information for doctor

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Extinguishing media

Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

Metal oxide fume

Metal oxide fume Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Ensure adequate ventilation

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to section 13.

Prevention of secondary hazards: No special measures required.

Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling
Precautions for safe handling
Keep container tightly sealed.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: Refrigerate

Information about storage in one common storage facility: Protect from heat.

Store away from oxidizing agents.

Further information about storage conditions:
Keep container tightly sealed.
Refrigerate

Refrigerate
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: No data

Exposure controls

Personal protective equipment

General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin

Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

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(Contd. of page 2)

Product name: Allenyltri-n-butyltin

Penetration time of glove material (in minutes) Not determined

Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties General Information

Appearance: Form:

Color: Odor: Odor threshold:

pH-value: Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:

Danger of explosion: Explosion limits: Lower:

Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density

Vapor density Evaporation rate Solubility in / Miscibility with

Viscosity: dynamic:

kinematic: Other information Not determined

Not determined

Not determined

Liauid

Colorless Not determined

Not determined 80-82 °C (176-180 °F) (0.1mm) Not determined > 110 °C (> 230 °F) Not determined. Not determined Not determined

Not determined. Not determined Not determined

Not determined 1.107 g/cm³ (9.238 lbs/gal) Not determined. Not determined

Water: Not miscible or difficult to mix
Partition coefficient (n-octanol/water): Not determined.

Not determined.

Not determined

Not determined. No further relevant information available

10 Stability and reactivity

Reactivity No information known.
Chemical stability Stable under recommended storage conditions.
Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions Reacts with strong oxidizing agents
Conditions to avoid No further relevant information available.

Incompatible materials: Oxidizing agents

Heat

Hazardous decomposition products: Carbon monoxide and carbon dioxide Metal oxide fume

11 Toxicological information

Information on toxicological effects

Fatal if swallowed.
Toxic in contact with skin.
Danger through skin absorption.
LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

Reproductive toxicity: No effects known.

Reproductive toxicity: NO enects known.

Specific target organ system toxicity - repeated exposure:

Causes damage to the kidneys and the liver through prolonged or repeated exposure. Route of exposure: Oral and Inhalative.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecological information

I oxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Ecotoxical effects:
Remark: Very toxic for aquatic organisms
Additional ecological information:
General notes:
Do not allow material to be released to the environment without processes.

General notes:

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

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(Contd. of page 3)

Product name: Allenyltri-n-butyltin

Very toxic for aquatic organisms
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.
Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation Consult state, local or national regulations to ensure proper disposal.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, IMDG, IATA UN proper shipping name

Organotin compounds, liquid, n.o.s. (Allenyltri-n-butyltin) ORGANOTIN COMPOUND, LIQUID, N.O.S. (Allenyltri-n-butyltin) IMDG, IATA

UN2788

Transport hazard class(es)

DOT



Class 6.1 Toxic substances. 6.1 Label Class 6.1 (T3) Toxic substances 6.1 IMDG, IATA

6.1 Toxic substances. Class

Packing group DOT, IMDG, IATA

Environmentally hazardous substance, liquid Environmental hazards:

Special precautions for user Warning: Toxic substances EMS Number. F-A.S-A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

Transport/Additional information:

DOT

Marine Pollutant (DOT): No

UN "Model Regulation": UN2788, Organotin compounds, liquid, n.o.s. (Allenyltri-n-butyltin), 6.1, II

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





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Precautionary statements
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P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Take off immediately all contaminated clothing.

P405 P501

Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations
This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity, substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

(Contd. on page 5)

Product name: Allenyltri-n-butyltin

(Contd. of page 4)
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the Market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department Issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods by Road) IMDG: International Agreement of Transportation Goods by Road) IMDG: International Agreement of Transportation Goods by Road) IMDG: International Agreement of Transportation Goods by Road) IMDG: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)