

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

1 Identification of substance

Product details

Trade name

Tri-n-propyltin chloride

Stock number:

41459

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

2 Hazards identification

Hazard designation:

T Toxic
N Dangerous for the environment

Information pertaining to particular dangers for man and environment

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements

**Danger**H301 - Toxic if swallowed.
H311 - Toxic in contact with skin.
H331 - Toxic if inhaled.**Warning**H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see on this label).
P361 Remove/Take off immediately all contaminated clothing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Tri-n-propyltin chloride (CAS# 2279-76-7); 100%

Designation: (CAS#)

Identification number(s):

218-910-3

EINECS Number:

050-007-00-8

Index number:

4 First aid measures

General information

Instantly remove any clothing soiled by the product.
Remove breathing apparatus only after soiled clothing has been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.
Do not induce vomiting; instantly call for medical help.
Seek immediate medical advice.

After inhalation

After skin contact

After eye contact

After swallowing

5 Fire fighting measures

Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:
Hydrogen chloride (HCl)
Toxic metal compounds
Wear self-contained breathing apparatus.
Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Measures for cleaning/collecting:

Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Additional information:

7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.
Open and handle container with care.

Information about protection against explosions and fires:

No special measures required.

Storage
Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Store away from water.
Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store in a locked cabinet or with access restricted to technical experts or their assistants.

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

Trade name **Tri-n-propyltin chloride**

(Contd. of page 1)

8 Exposure controls and 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.

Components with critical values that require monitoring at the workplace:

Tin, organic compounds, as Sn
mg/m³
ACGIH TLV 0.1; 0.2-STEL (skin)
Not classifiable as a human carcinogen
Austria MAK 0.1 (skin)
Belgium TWA 0.1 (skin)
Denmark TWA 0.1 (skin)
Finland TWA 0.1; 0.3-STEL (skin)
France VME 0.1
Germany MAK 0.1 (skin)
Hungary 0.1-STEL (skin)
Korea TLV 0.1; 0.2-STEL (skin)
Norway TWA 0.1
Switzerland MAK-W 0.1; 0.2-KZG-W (skin)
United Kingdom 0.1; 0.2-STEL (skin)
USA PEL 0.1
No data

Additional information:

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
Safety glasses
Protective work clothing.

Breathing equipment:

Eye protection:

Body protection:

9 Physical and chemical properties:

General Information

Form:	Liquid
Colour:	Colourless
Smell:	Unpleasant
Change in condition	
Melting point/Melting range:	-23.5°C
Boiling point/Boiling range:	123/13mm Hg°C
Sublimation temperature / start:	Not determined
Flash point:	95°C
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density at 20°C	1.268 g/cm ³
Solubility in / Miscibility with Water:	Hydrolyzes slowly

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

Dangerous reactions:

Dangerous products of decomposition:

No decomposition if used and stored according to specifications.
Water/moisture
Oxidizing agents
No dangerous reactions known
Hydrogen chloride (HCl)
Toxic metal compounds
Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin:

on the eye:

Sensitization:

Additional toxicological information:

Irritant for skin and mucous membranes.
Irritant effect.
No sensitizing effect known.
Danger by skin resorption.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

12 Ecological information:

Ecotoxicological effects:

Remark:

Additional ecological information:

General notes:

Very toxic for fish

Water danger class 3 (Self-assessment): extremely hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.
Also poisonous for fish and plankton in water bodies.
Do not allow material to be released to the environment without proper governmental permits.
Very toxic for aquatic organisms

GB

(Contd. on page 3)

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

Trade name **Tri-n-propyltin chloride**

(Contd. of page 2)

13 Disposal considerations

Product:	
Recommendation	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class:	6.1 (T3) Toxic substances.
Kemler Number:	60
UN-Number:	2788
Packaging group:	II
Label	6.1
Special marking:	Symbol (fish and tree)
Designation of goods:	2788 ORGANOTIN COMPOUND, LIQUID, N.O.S. (Tri-n-propyltin chloride)
Limited quantities (LQ)	LQ17
Transport category	2
Tunnel restriction code	D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:	6.1
UN Number:	2788
Label	6.1
Packaging group:	II
Marine pollutant:	No
Correct technical name:	ORGANOTIN COMPOUND, LIQUID, N.O.S. (Tri-n-propyltin chloride)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:	6.1
UN/ID Number:	2788
Label	6.1
Packaging group:	II
Correct technical name:	ORGANOTIN COMPOUND, LIQUID, N.O.S. (Tri-n-propyltin chloride)

UN "Model Regulation":

Environmental hazards: UN2788, ORGANOTIN COMPOUND, LIQUID, N.O.S., 6.1, II
Environmentally hazardous substance, liquid; Marine Pollutant

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:



T Toxic
N Dangerous for the environment

Risk phrases: 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

National regulations

Information about limitation of use:

For use only by technically qualified individuals.
Employment restrictions concerning young persons must be observed.

Water hazard class:

Water danger class 3 (Self-assessment): extremely hazardous for water.

16 Other information:

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.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact: Zachariah Holt

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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)