

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 14.07.2010

Printing date 14.07.2010

1 Identification of substance**Product details****Trade name****Tetramethyltin****Stock number:**

71145

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
F Highly flammable
Information pertaining to particular dangers for man and environmentR 11 Highly flammable.
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.**GHS label elements**

Danger

H225 - Highly flammable liquid and vapour.


Danger

H301 - Toxic if swallowed.

H311 - Toxic in contact with skin.

H330 - Fatal if inhaled.

Response:P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P320 Specific treatment is urgent (see on this label).

P361 Remove/Take off immediately all contaminated clothing.

P405 Store locked up.

Storage:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Disposal:**3 Composition/information on ingredients****Chemical characterization:****Designation: (CAS#)**

Tetramethyltin (CAS# 594-27-4); 100%

Identification number(s):**EINECS Number:**

209-833-6

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.**After inhalation**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.**After skin contact**Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.**After eye contact**Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.**After swallowing**

Do not induce vomiting; instantly call for medical help.

Seek immediate medical advice.

5 Fire fighting measures**Suitable extinguishing agents**

Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.

Protective equipment:Wear self-contained breathing apparatus.
Wear full protective suit.**6 Accidental release measures****Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation

Keep away from ignition sources

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

Measures for cleaning/collecting:

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Keep away from ignition sources.

Additional information:

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

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:**Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.**Storage Requirements to be met by storerooms and containers:**

Store in cool location.

Information about storage in one common storage facility:

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.

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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

Additional information:

No data

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
Face protection
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: -54°C
Boiling point/Boiling range: 74-75°C
Sublimation temperature / start: Not determined

Flash point: -12°C

Ignition temperature: Not determined

Decomposition temperature: Not determined

Critical values for explosion:

Lower: 1.9 Vol %
Upper: Not determined

Steam pressure: Not determined

Density at 20°C 1.291 g/cm³

Solubility in / Miscibility with Water: Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents

Dangerous reactions:

Reacts with strong oxidizing agents

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide
Toxic metal oxide smoke

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin:

Irritant for skin and mucous membranes.

on the eye:

Irritant effect.

Sensitization:

No sensitizing effect known.

Additional toxicological information:

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:

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

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.

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**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: 3 (FT1) Flammable liquids.
Kemler Number: 336
UN-Number: 1992
Packaging group: II
Label: 3+6.1
Designation of goods: 1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (Tetramethyltin)
Limited quantities (LQ): LQ0
Transport category: 2
Tunnel restriction code: D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 3
UN Number: 1992
Label: 3+6.1
Packaging group: II
EMS Number: F-E,S-D
Marine pollutant: No
Correct technical name: FLAMMABLE LIQUID, TOXIC, N.O.S. (Tetramethyltin)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 3
UN/ID Number: 1992
Label: 3+6.1
Packaging group: II
Correct technical name: FLAMMABLE LIQUID, TOXIC, N.O.S. (Tetramethyltin)

UN "Model Regulation":

UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S., 3 (6.1), II

15 Regulatory information**Designation according to EC guidelines:****Code letter and hazard designation of product:**

T Toxic
F Highly flammable

Risk phrases:

11 Highly flammable.
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Safety phrases:

9 Keep container in a well-ventilated place.
28 After contact with skin, wash immediately with plenty of soap and water.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

National regulations**Information about limitation of use:**

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

Water hazard class:

Water hazard class 1 (Self-assessment): slightly 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)