# SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 5.4 Revision Date 08/21/2014 Print Date 10/19/2018

#### 1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name Tetrakis(dimethylamido)tin(IV) : Product Number 698431 Brand Aldrich CAS-No. 1066-77-9 ÷ 1.2 Relevant identified uses of the substance or mixture and uses advised against : Laboratory chemicals, Manufacture of substances Identified uses Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA +1 800-325-5832 Telephone Fax +1 800-325-5052 1.4 **Emergency telephone number**

## Emergency Phone # : +1-703-527-3887 (CHEMTREC)

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

Danger

#### 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word



Hazard statement(s) H225 H302 + H312 + H332 H314	Highly flammable liquid and vapour. Harmful if swallowed, in contact with skin or if inhaled Causes severe skin burns and eye damage.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces 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 P261 P264 P270 P271 P280	Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face
P301 + P312	protection. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P322	Specific measures (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

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

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1 Substances

Hazardous components		
Molecular weight CAS-No.	:	295.01 g/mol 1066-77-9
Formula	:	C <sub>8</sub> H <sub>24</sub> N <sub>4</sub> Sn
Synonyms	:	Tin(IV) dimethylamide

Classification	Concentration
Flam. Liq. 2; Acute Tox. 4;	90 - 100 %
Skin Corr. 1B; Eye Dam. 1;	
H225, H302 + H312 + H332,	
H314	
	Flam. Liq. 2; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; H225, H302 + H312 + H332,

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
- **4.3 Indication of any immediate medical attention and special treatment needed** No data available

#### **5. FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx), Tin/tin oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

#### 6.2 Environmental precautions

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

- **6.3** Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Handle and store under inert gas. Air and moisture sensitive.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

**Components with workplace control parameters** Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

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

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

		•••	
	a)	Appearance	Form: liquid
	b)	Odour	No data available
	c)	Odour Threshold	No data available
	d)	рН	No data available
	e)	Melting point/freezing point	No data available
	f)	Initial boiling point and boiling range	53 - 55 °C (127 - 131 °F) at 1,013 hPa (760 mmHg)
	g)	Flash point	-7.8 °C (18.0 °F) - closed cup
	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
	I)	Vapour density	No data available
	m)	Relative density	1.169 g/cm3
	n)	Water solubility	No data available
	o)	Partition coefficient: n- octanol/water	No data available
	p)	Auto-ignition temperature	No data available
Aldrich -	q) 6984	Decomposition 431	No data available

temperature

- r) Viscosity No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

# 9.2 Other safety information No data available

#### **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** Vapours may form explosive mixture with air.

#### 10.4 Conditions to avoid Heat, flames and sparks. Extremes of temperature and direct sunlight.

#### **10.5** Incompatible materials Strong oxidizing agents, Strong acids

**10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

#### **11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

#### Acute toxicity No data available

Inhalation: No data available

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 Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available

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**

**RTECS:** Not available

Nausea, Headache, Vomiting, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis

#### **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

No data available

- 12.2 Persistence and degradability 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 PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

#### **13. DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

#### DOT (US)

UN number: 2924 Class: 3 (8) Packing group: II Proper shipping name: Flammable liquids, corrosive, n.o.s. (Tetrakis(dimethylamino)tin) Reportable Quantity (RQ): Marine pollutant: No Poison Inhalation Hazard: No

#### IMDG

UN number: 2924 Class: 3 (8) Packing group: II EMS-No: F-E, S-C Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Tetrakis(dimethylamino)tin) Marine pollutant: No

#### ΙΑΤΑ

UN number: 2924 Class: 3 (8) Packing group: II Proper shipping name: Flammable liquid, corrosive, n.o.s. (Tetrakis(dimethylamino)tin)

#### **15. REGULATORY INFORMATION**

#### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components	CAS-No.	Revision Date
Tetrakis(dimethylamino)tin	1066-77-9	
New Jersey Right To Know Components		
Tetrakis(dimethylamino)tin	CAS-No. 1066-77-9	Revision Date

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **16. OTHER INFORMATION**

#### Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Eye Dam. Flam. Liq. H225 H302 H302 + H312 + H332 H312 H314	Acute toxicity Serious eye damage Flammable liquids Highly flammable liquid and vapour. Harmful if swallowed. Harmful if swallowed, in contact with skin or if inhaled Harmful in contact with skin. Causes severe skin burns and eye damage.
HMIS Rating Health hazard: Chronic Health Haz Flammability: Physical Hazard	3 ard: 3 0
<b>NFPA Rating</b> Health hazard:	3

3

0

#### Fire Hazard: Reactivity Hazard:

#### **Further information**

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**Preparation Information** Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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