



SAFETY DATA SHEET TIN ALKALINE

1. Identification

Product identifier

Product name TIN ALKALINE

Product number 2092

Recommended use of the chemical and restrictions on use

Application Industrial Use

Details of the supplier of the safety data sheet

Supplier SIFCO Applied Surface Concepts
5708 E. Schaaf Road
Independence, Ohio 44131
U.S.A.
Tel.: +1 216-524-0099
Fax: +1 216-524-6331
E-Mail: info@sifcoasc.com

Emergency telephone number

Emergency telephone CHEMTREC (United States) (800) 424-9300; CHEMTREC (International) +1 703-527-3887

2. Hazard(s) identification

Classification of the substance or mixture

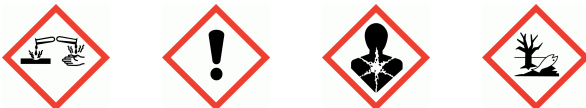
Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P260 Do not breathe vapor/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P304+P340 If inhaled: Remove person to fresh air and keep 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.
 P501 Dispose of contents/ container in accordance with national regulations.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P270 Do not eat, drink or smoke when using this product.
 P284 [In case of inadequate ventilation] wear respiratory protection.
 P301+P310 If swallowed: Immediately call a poison center/ doctor.
 P302+P352 If on skin: Wash with plenty of water.

Contains

TIN(II) SULPHATE, DIETHYLENETRIAMINE

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

TIN(II) SULPHATE 10-15% CAS number: 7488-55-3 M factor (Acute) = 1 M factor (Chronic) = 1
Classification Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Muta. 2 - H341 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
AMMONIUM TARTRATE 10-15% CAS number: 14307-43-8
Classification Not Classified
DIETHYLENETRIAMINE 5-10% CAS number: 111-40-0
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

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DIAMMONIUM TARTRATE	5-10%
CAS number: 3164-29-2	
Classification	
Not Classified	
AMMONIUM SULPHATE	<1%
CAS number: 7783-20-2	
Classification	
Not Classified	

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

Inhalation	Coughing, chest tightness, feeling of chest pressure.
Ingestion	Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. May cause stomach pain or vomiting.
Skin contact	Causes severe burns. May cause sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Causes serious eye damage. May cause blurred vision and serious eye damage. Immediate first aid is imperative.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Specific hazards Toxic gases or vapors.

Advice for firefighters

Protective actions during firefighting Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Provide adequate general and local exhaust ventilation.

Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage.

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate general and local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight.

Storage class Toxic storage. Corrosive storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

DIETHYLENETRIAMINE

Long-term exposure limit (8-hour TWA): ACGIH 1 ppm 4.2 mg/m³

Sk

ACGIH = American Conference of Governmental Industrial Hygienists.

Sk = Danger of cutaneous absorption.

Exposure controls

Protective equipment



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Appropriate engineering controls	As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.
Eye/face protection	Tight-fitting safety glasses.
Hand protection	It is recommended that chemical-resistant, impervious gloves are worn. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. It is recommended that gloves are made of the following material: Nitrile rubber.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Odor	Ammonia.
pH	pH (concentrated solution): 7.0-7.4
Relative density	1.170-1.200 @ 20°C
Other information	Not available.

10. Stability and reactivity

Reactivity	There are no known reactivity hazards associated with this product.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Not determined.
Conditions to avoid	Avoid excessive heat for prolonged periods of time.
Materials to avoid	Strong acids.
Hazardous decomposition products	None at ambient temperatures.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 5,681.82

Acute toxicity - dermal

ATE dermal (mg/kg) 12,500.0

Acute toxicity - inhalation

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ATE inhalation (dusts/mists mg/l) 10.79

Inhalation	May cause respiratory system irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingestion	May cause stomach pain or vomiting.
Skin Contact	Causes severe burns. May cause an allergic skin reaction. May cause sensitisation by skin contact.
Eye contact	Causes serious eye damage.
Acute and chronic health hazards	May cause genetic defects.
Route of entry	Ingestion Inhalation Skin and/or eye contact

Toxicological information on ingredients.TIN(II) SULPHATEAcute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2.207

Species Rat

Acute toxicity - inhalation

ATE inhalation (dusts/mists mg/l) 1.5

DIETHYLENETRIAMINEAcute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,080.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,090.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

12. Ecological Information

Ecotoxicity Dangerous for the environment.

Toxicity No data available.

Ecological information on ingredients.TIN(II) SULPHATEAcute aquatic toxicity

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LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 48 hour: 99.5 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

DIETHYLENETRIAMINE

Acute toxicity - fish	LC ₅₀ , 96 hour: 1014 mg/l, Poecilia reticulata (Guppy)
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Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bio-Accumulative Potential The product does not contain any substances expected to be bioaccumulating.

Mobility in soil

Mobility The product is soluble in water.

Other adverse effects

Other adverse effects Not determined.

13. Disposal considerations**Waste treatment methods**

General information Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

14. Transport information**UN Number**

UN No. (TDG)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760
UN No. (DOT)	1760

UN proper shipping name

Proper shipping name (TDG)	CORROSIVE LIQUID, N.O.S. (DIETHYLENETRIAMINE)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (DIETHYLENETRIAMINE)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (DIETHYLENETRIAMINE)
Proper shipping name (DOT)	CORROSIVE LIQUID, N.O.S. (DIETHYLENETRIAMINE)

Transport hazard class(es)

TDG class	8
TDG label(s)	8
IMDG Class	8

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ICAO class/division 8

Transport labels**Packing group**

TDG Packing Group II

IMDG packing group II

ICAO packing group II

DOT packing group II

Environmental hazards**Environmentally Hazardous Substance****Special precautions for user**

EmS F-A, S-B

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

15. Regulatory information**US Federal Regulations****SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

Exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Ammonium Tartrate
Final CERCLA RQ: 5000 lbs
Diammonium Tartrate
Final CERCLA RQ: 5000 lbs

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Exempt.

SARA 313 Emission Reporting

Exempt.

CAA Accidental Release Prevention

Exempt.

SARA (311/312) Hazard Categories

Acute
Chronic

OSHA Highly Hazardous Chemicals

Exempt.

US State Regulations

TIN ALKALINE

California Proposition 65 Carcinogens and Reproductive Toxins

Exempt.

California Directors List of Hazardous Substances

Exempt.

Inventories

US - TSCA

All ingredients are present.

16. Other information

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Carc. = Carcinogenicity
 Eye Dam. = Serious eye damage
 Eye Irrit. = Eye irritation
 Flam. Liq. = Flammable liquid
 Muta. = Germ cell mutagenicity
 Repr. = Reproductive toxicity
 Resp. Sens. = Respiratory sensitisation
 Skin Corr. = Skin corrosion
 Skin Irrit. = Skin irritation
 Skin Sens. = Skin sensitisation
 STOT RE = Specific target organ toxicity-repeated exposure
 STOT SE = Specific target organ toxicity-single exposure

Revision date

6/1/2017

Revision

2

Hazard statements in full

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H341 Suspected of causing genetic defects.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

The Information in this data sheet is believed to be correct but neither we nor our employees or agents give any warranty or make any representation to the accuracy thereof and accept no liability for any loss, injury or damage which may result in it's use. The sole purpose of this data sheet is to provide guidance on the safe handling and use of the products to which it relates. It does not form part of any product specification nor part of any contract. It is not practical for the guidance and information in this data sheet to cover every conceivable application of a product and as we may not be aware of the use to which the products covered by this data sheet are to be put it remains the responsibility of the user to conduct it's own tests and to satisfy itself as to the suitability of the product.