

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: 3-Aminopropyltriethoxysilane

Product code: A0439

Product use:For laboratory research purposes.Restrictions on use:Not for drug or household use.

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sales-US@TCIchemicals.com www.TCIchemicals.com

Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour

+1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

WHMIS 2015:

Acute Toxicity - Oral [Category 4]
Eye Damage/Irritation [Category 1]
Skin Corrosion/Irritation [Category 1B]

Signal word: Danger!

Hazard Statement(s): Harmful if swallowed

Causes severe skin burns and eye damage

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention]

[Response]

[Storage]

Do not breathe dusts or mists. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Immediately call a poison center or doctor. Wash contaminated clothing. Rinse skin with water of shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May be harmful if in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: 3-Aminopropyltriethoxysilane

 Percent:
 >98.0%(GC)(T)

 CAS RN:
 919-30-2

 Molecular Weight:
 221.37

 Chemical Formula:
 C9H23NO3Si

Synonyms: APTS, Triethoxy-3-aminopropylsilane

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Immediately call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Symptoms/effects:

Acute: Pain. Redness.

Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media: Water (It may scatter and spread fire.)

Specific hazards arising from the

chemical:

Hazardous combustion products:

Other specific hazards:

These products include: Carbon oxides Nitrogen oxides Silicates

Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Environmental precautions:

Prevent product from entering drains.

Methods and materials for containment

and cleaning up:

Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly

disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

generation of vapour or mist. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.

Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents.

Moisture-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed Appropriate engineering controls:

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Respiratory protection:

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Eve protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear

Colour: Colorless - Almost colorless

No data available Odour: Odor threshold: No data available No data available Odour threshold:

Melting point/freezing point: No data available No data available pH: Boiling point/range: 217°C (423°F) Vapour pressure: No data available.

No data available **Decomposition temperature:** Vapour density: 7.7 **Dynamic Viscosity:** 1.6mPa·s

Relative density: 0.95

Kinematic viscosity: No data available

Log Pow: No data available **Evaporation rate(Butyl** No data available

Acetate=1):

98°C (208°F) Autoignition temperature: Flash point: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

0.8% Lower: Upper: 4.5%

Solubility(ies):

No data available [Water] [Other solvents] No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents, Acids

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Silicon oxides

11. TOXICOLOGICAL INFORMATION

RTECS Number: TX2100000

Acute Toxicity:

ipr-mus LD50:260 mg/kg orl-mus LD50:4 g/kg orl-rat LD50:1780 mg/kg skn-rbt LD50:4 mL/kg

Skin corrosion/irritation: skn-rbt 5 mg/24H SEV

Serious eye damage/irritation:

eye-rbt 750 ug/24H SEV

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity: No data available

> IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity: No data available

Target organ(s): No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

48h LC50:>1000 mg/L (Oryzias latipes) Fish: 96h LC50:>1000 mg/L (Oryzias latipes)

No data available Crustacea: No data available Algae:

Persistence / degradability: 54 % (by BOD), 64 % (by TOC)

Bioaccumulative potential(BCF):

Mobility in soil

<0.53 (conc. 2 mg/L), <5.4 (conc. 0.2 mg/L)

Log Pow: No data available No data available Soil adsorption (Koc): Henry's Law (PaM 3/mol): No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2735 Amines, liquid, corrosive, n.o.s 8 Corrosive material

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2735 Amines, liquid, corrosive, n.o.s 8 Corrosive material

<u>IMDG</u>

UN UN2735 Proper Shipping Name: Class or Division: Packing Group:

numb Amines, liquid, corrosive, n.o.s 8 Corrosive material II er:

EmS number: F-E, S-B

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

Massachusetts Not Listed
New Jersey Not Listed
Pennsylvania Not Listed

Other Information

NFPA Rating:
Health: 3
Flammability: 1
Instability: 1
Physical: 0

Not Listed

International Inventories

California Proposition 65:

 Canada: DSL
 On DSL

 EC-No:
 213-048-4

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.