

SAFETY DATA SHEET

Date Printed: 05/20/2024

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SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Triisopropylgallium

Product Code: TIP-GA-05

CAS Number: 54514-59-9

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Pyrophoric (USA) Highly Flammable (EU).

Reacts violently with water, liberating extremely flammable gases.

Spontaneously flammable in air.

HMIS RATING

HEALTH: 0

FLAMMABILITY: 4

REACTIVITY: 4

SPECIAL HAZARD(S): Water reactive

NFPA RATING

HEALTH: 0

FLAMMABILITY: 4

REACTIVITY: 4

SPECIAL HAZARD(S): Water reactive

For additional information on toxicity, please refer to Section 11.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name CAS # SARA 313

TRIISOPROPYLGALLIUM, ELECTRONIC 54514-59-9 No
GRADE
Formula C₉H₂₁Ga₁

SECTION 4. FIRST AID MEASURES

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

SECTION 5. FIREFIGHTING MEASURES

FLAMMABLE HAZARDS

Flammable Hazards: Yes

Pyrophoric/Autoignition: Yes

CONDITIONS OF FLAMMABILITY

Catches fire if exposed to air.

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable: Do not use water.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Pyrophoric material. Emits toxic fumes under fire conditions. Water reactive material.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors.

Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

User Exposure: Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed. Handle and store under argon.

Incompatible Materials: Do not allow contact with water

SPECIAL REQUIREMENTS

Handle and store under inert gas.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State: Liquid

Property Value At Temperature or Pressure

Molecular Weight 198,9900 AMU

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Freezing Point N/A

Vapor Pressure N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Bulk Density N/A

Odor Threshold N/A

Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Surface Tension N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point N/A
Explosion Limits N/A
Flammability N/A
Autoignition Temp N/A
Refractive Index N/A
Optical Rotation N/A
Miscellaneous Data N/A
Solubility N/A
N/A = not available

SECTION 10. STABILITY AND REACTIVITY

STABILITY

Stable: Stable.

Conditions to Avoid: Catches fire if exposed to air. Do not allow water to enter container because of violent reaction.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. ECOLOGICAL INFORMATION

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT

Proper Shipping Name: Organometallic substance, liquid, pyrophoric, water-reactive

UN#: 3394

Class: 4.2

Packing Group: Packing Group I

Hazard Label: Spontaneously combustible

Hazard Label: Dangerous when wet.

PIH: Not PIH

IATA

Proper Shipping Name: Organometallic substance, liquid, pyrophoric, water-reactive

IATA UN Number: 3394

Hazard Class: 4.2

Packing Group: I

Not Allowed - Aircraft: FORBIDDEN

Not Allowed - Aircraft: FORBIDDEN

SECTION 15. REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: F

Indication of Danger: Highly Flammable.

R: 14/15-17

Risk Statements: Reacts violently with water, liberating extremely flammable gases. Spontaneously flammable in air.

S: 16-36/37/39-43

Safety Statements: Keep away from sources of ignition - no smoking. Wear suitable protective clothing, gloves, and eye/face protection. In case of fire, use dry powder. Never use water.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Pyrophoric (USA) Highly Flammable (EU).

Risk Statements: Reacts violently with water, liberating extremely flammable gases. Spontaneously flammable in air.

Safety Statements: Keep away from sources of ignition - no smoking. Wear suitable protective clothing, gloves, and eye/face protection. In case of fire, use dry powder. Never use water.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No
NDSL: No

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.