

MSDS - Material Safety Data Sheet

Section 1.	Product and Company Identification	
Supplier	CovaChem, LLC. 6260 East Riverside Blvd, STE 119 Loves Park, IL 61111 Phone: +1.815.315.1271 x511 Fax: +1.815.315.1272 +1.815.714.8421	
Emergency Phone #:	12201-10x1, 12201-25, 12201-100, 12201-custom	
Product Number	12201-10x1, 12201-25, 12201-100, 12201-custom	
Product Name	Trifluoroacetic anhydride (TFAA)	
Section 2.	Composition / Information on Ingredients	
OSHA Hazards	Corrosive Target Organ Effects	
HMIS Classification	Health Hazard	3
	Flammability	0
	Physical Hazard	1
	Health Hazard	3
NFPA Rating	Flammability	0
	Physical Hazard	1
	Reactivity Hazard	2
	Potential Health Effects	Inhalation
	Skin	Causes severe skin irritation. May be harmful if absorbed through the skin.
	Eyes	Causes severe eye burns.
	Ingestion	May be harmful if ingested.
Section 3.	Hazards Identification	
Synonyms	TFAA; Trifluoroacetic acid anhydride	
Molecular Weight	210.03	
Formula	C4F6O3	
Section 4.	First Aid Measures	
If Inhaled	Move to fresh air. Give artificial respiration if breathing has ceased.	
In case of Skin Contact	Remove affected clothes immediately. Wash with soap and water.	
In Case of Eye Contact	Flush with plenty of water. Seek medical attention promptly.	
If Swallowed	Rinse mouth with water and seek medical attention promptly.	
Section 5.	Fire-Fighting Measures	
Condition of Flammability	Material is not flammable or combustible.	
Suitable Extinguishing Media	Water, dry chemical, alcohol resistant foam are all suitable.	
Specific Hazards from Chemical	Self-contained breathing apparatus	
Protective Equipment	If needed, wear self contained breathing apparatus.	
Hazardous Combustion Products	Carbon oxides and hydrogen fluoride may form upon combustion	
Section 6.	Accidental Release Measures	
Personal Precautions	Avoid breathing dust or vapors. Use in well ventilated area.	
Environmental precautions	Prevent environmental release. Do not pour down drain.	
Section 7.	Handling and Storage	
Conditions for Safe Storage	Store container in a well ventilated, dry location. Keep away from ignition sources.	
Precautions regarding safe handling	Provide adequate ventilation, used in a fume hood, keep away from ignition sources.	
Section 8.	Exposure Controls / Personal Protection	
Does not contain any substance with occupational exposure limit values.		
Respiratory Protection	Use of an air purifying respiratory is recommended, type N100 or type P3 (EN 143).	
Hand Protection	Handle with nitrile rubber gloves.	
Eye Protection	Use a face shield and safety glasses.	
Body and Skin Protection	Complete chemical protective suit is recommended. The personal protective equipment should be selected depending upon the concentration and amount of chemical at work station.	
	Wash hands and arms after use, prior to eating, and before breaks. Always use good industrial hygiene and safety practices.	
Hygiene		
Section 9.	Physical and Chemical Properties	
Form	clear, colorless liquid	
Melting Point	unavailable	
Boiling Point	40 °C	
Flash Point	unavailable	
Ignition Temperature	unavailable	
Autoignition Temperature	unavailable	
Density	1.511 g/cm3 at 20 °C	
Water Solubility	unavailable	
Partition Coeff: n-octanol/water	unavailable	
Section 10.	Stability and Reactivity	
Chemical Stability	Stable under recommended storage conditions.	
Possibility of hazardous reactions	unavailable	
Conditions to Avoid	Keep away from heat, sparks and ignition sources.	

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Materials to Avoid

Strong Oxidizers, Strong Acids

Hazardous decomposition products

Silicon oxides, hydrogen flouride, carbon oxides formed under fire conditions.

Section 11.

Toxicology

Oral LD50
Inhalation LC50
Dermal LD50
Skin corrosion / irritation
Eye Damage or Irritation
Skin and Respiratory Sensitization
Germ Cell Mutagenicity
Carcinogeneity

data unavailable
data unavailable
data unavailable
severe skin irritation - 24 hours (rabbit)
severe eye irritation - 24 hours (rabbit)
data unavailable
data unavailable

IARC

No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by ACGIH.

NTP

No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by NTP.

OSHA

No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity
Teratogenicity
Aspiration Hazard
Potential Health Effects

data unavailable
data unavailable
data unavailable

Inhalation
Ingestion
Skin
Eyes

May be harmful if inhaled. Material is damaging to mucous membranes and upper respiratory tract.
May cause harm if swallowed.
May cause harm if absorbed through skin.
May cause eye irritation and burns.

Section 12.

Ecological Information

Toxicology
Persistence and degradability
Bioaccumulative potential
Mobility in soil
PBT and vPvB assessment
Other Adverse effects

data unavailable
data unavailable
data unavailable
data unavailable
data unavailable
data unavailable

Section 13.

Disposal Consideration

Disposal Considerations

Generation of waste should be kept to a minimum when possible. Any waste generated should be recycled when possible. Please dispose any unused or used materials in accordance with applicable national, regional and local laws and regulations.

Section 14.

Transportation Information

DOT (USA)

UN Number: 3265 Packing Group: I Class: 8

Shipping Name: Corrosive liquid, (Trifluoroacetic anhydride)

Poison Inhalation Hazard: No Marine Pollutant: No

IMDG

UN Number: 3265 Packing Group: I Class: 8

Shipping Name: Corrosive liquid, (Trifluoroacetic anhydride)

Poison Inhalation Hazard: No Marine Pollutant: No

IATA

UN Number: 3265 Packing Group: I Class: 8

Shipping Name: Corrosive liquid, (Trifluoroacetic anhydride)

Section 15.

Regulatory Information

OSHA Hazards

Flammable liquid, irritant

SARA 302 Components
SARA 311/312

No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302.
Fire Hazard, Acute Health Hazard

Californian Prop. 65 Components
Right to Know Components

This material does not contain any chemicals known to the State of California to cause reproductive harm or birth defects.
[Trifluoroacetic anhydride \(CAS# 407-25-0\)](#)

Section 16.

Other Information

Other Information

The information represented in this MSDS is believed to be correct and is based on the current state of our knowledge. This document or any other document does not represent or suggest any type of warantee or guarantee of the product properties or characteristics of this material.
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