

SAFETY DATA SHEET

Revision Date 24-Dec-2021

Revision Number 4

1. Identification

Product Name

1,3,5-Benzenetricarboxylic acid chloride

CAS No

Cat No. :

Synonyms

4422-95-1

Trimesoyl chloride

Recommended Use Uses advised against Laboratory chemicals. Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

<u>Company</u>

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

AC164370000; AC164370050; AC164371000; AC164375000

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Category 1 B Category 1

Label Elements

Signal Word Danger

Hazard Statements Causes severe skin burns and eye damage



Precautionary Statements Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %
1,3,5-Benzenetricarbonyl trichloride	4422-95-1	98

	4. First-aid measures			
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.			
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.			
Inhalation	Remove from exposure, lie down. Remove to fresh air.			
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.			
Most important symptoms and effects	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation			
Notes to Physician	Treat symptomatically			
5. Fire-fighting measures				

Suitable Extinguishing Media	Carbon dioxide (CO 2). Dry chemical. Chemical foam.
Unsuitable Extinguishing Media	No information available
Flash Point	> 112 °C / > 233.6 °F
Method -	No information available
Autoignition Temperature Explosion Limits	No information available
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t No information available
j j	

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen chloride gas. **Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Health 3	Flammability 0	Instability 0	Physical hazards N/A				
	6. Accidental re	lease measures					
Personal Precautions Environmental Precautions		Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional Ecological Information.					
Methods for Containment and Cle Up		ent material (e.g. sand, silica ge e, closed containers for disposa					
	7. Handling	and storage					
Handling	Ensure adequate ventilati	on.					
Storage.	Corrosives area.						
8. 1	Exposure controls	/ personal protecti	on				
Exposure Guidelines		tain any hazardous materials w gion specific regulatory bodies.	ith occupational exposure				
Engineering Measures	Ensure adequate ventilation	on, especially in confined areas					
Personal Protective Equipment							
Eye/face Protection		ve eyeglasses or chemical safe rection regulations in 29 CFR 15					
Skin and body protection	Wear appropriate protectiv	ve gloves and clothing to preven	nt skin exposure.				
Respiratory Protection	Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.						

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical	l and chemical properties
Physical State	Liquid
Appearance	Yellow
Odor	Odorless
Odor Threshold	No information available
рН	No information available
Melting Point/Range	34.5 - 36 °C / 94.1 - 96.8 °F
Boiling Point/Range	180 °C / 356 °F @ 16 mmHg
Flash Point	> 112 °C / > 233.6 °F
Evaporation Rate	No information available
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C9 H3 Cl3 O3
Molecular Weight	265.47

10. Stability and reactivity

Reactive Hazard	None known, based on information available		
Stability	Stable under normal conditions. Moisture sensitive.		
Conditions to Avoid	Incompatible products.		
Incompatible Materials	Strong oxidizing agents		
Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen chloride gas			
Hazardous Polymerization	No information available.		
Hazardous Reactions	None under normal processing.		

11. Toxicological information

Acute Toxicity

Product Information Component Information	No acute toxicity information is available for this product					
Component	LD50 Oral	LD50 Dermal	LC50 Inhalation			
1,3,5-Benzenetricarbonyl trichloride	>2000 mg/kg	Not listed	Not listed			
Toxicologically Synergistic Products <u>Delayed and immediate effects a</u>	No information available Is well as chronic effects from sh	ort and long-term exposu	re_			
Irritation	No information available					
Sensitization	No information available					

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico			
1,3,5-Benzenetricarbo nyl trichloride	4422-95-1	Not listed	Not listed	Not listed	Not listed	Not listed			
Mutagenic Effects		No information available							
Reproductive Effects	6	No information available.							
Developmental Effect	ts	No information available.							
Teratogenicity		No information ava	ailable.						
STOT - single expos STOT - repeated exp		None known None known							
Aspiration hazard		No information ava	ailable						
Symptoms / effects, delayed	both acute and	d Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation							
Endocrine Disruptor	Information	n No information available							
Other Adverse Effec	rse Effects The toxicological properties have not been fully investigated.								
		12. Ecol	ogical infor	mation					
<u>Ecotoxicity</u> Do not empty into drai	ins.								
Persistence and Deg	radability	No information available							
Bioaccumulation/ Ac	cumulation	No information available.							
Mobility		No information available.							
		13. Dispo	sal conside	erations					

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

	14. Transport information
DOT	
UN-No	UN3261
Hazard Class	8
Packing Group	II
<u>TDG</u>	
UN-No	UN3261
Hazard Class	8
Packing Group	II
UN-No	UN3261
Proper Shipping Name	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.*
Hazard Class	8
Packing Group	II
IMDG/IMO	
UN-No	UN3261
Proper Shipping Name	Corrosive solid, acidic, organic, n.o.s.
Hazard Class	8

Packing Group

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
1,3,5-Benzenetricarbonyl trichloride	4422-95-1	Х	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

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X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
1,3,5-Benzenetricarbonyl trichloride	4422-95-1	-	X	224-594-8	-	X	X	-	X	2011-3-5232

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable
U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.
Other International Regulations	
Mexico - Grade	No information available

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
1,3,5-Benzenetricarbonyl trichloride	4422-95-1	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
1,3,5-Benzenetricarbonyl trichloride	4422-95-1	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information			
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com		
Revision Date Print Date Revision Summary	24-Dec-2021 24-Dec-2021 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).		

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS