TCI EUROPE N.V.

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# SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

	evision number: 1	<b>Revision date:</b> 10/02/201
SECTION 1: Identification of the	substance/mixture and of the company/undertaking	q
.1 Product identifiers		,
Product name:	Ethyl Chlorodifluoroacetate	
Product code:	C1458	
I.2 Relevant identified uses of the su	ubstance or mixture and uses advised against	
Identified uses:	Reagents.	
1.3 Details of the supplier of the safe	ety data sheet	
Supplier:		
TCI EUROPE N.V.		
Boerenveldseweg 6		
Haven 1063 B-2070 Zwijndrecht		
Telephone: +32(0)3 735 07	00	
E-mail: sales-eu@tcichemic	als.com	
I.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification 2.1 Classification of the substance of		
Flammable liquids	Category 2	
Skin corrosion/irritation	Category 1B	
Serious eye damage/eye irritatio		
Serious eye damage/eye irritatio 2.2 Label elements		
Serious eye damage/eye irritatio 2.2 Label elements Pictograms or hazard symbols	n Category 1	
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# SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	Ethyl Chlorodifluoroacetate
Percent:	>97.0%(GC)
CAS RN:	383-62-0
EC-No:	206-850-0
Synonyms:	Chlorodifluoroacetic Acid Ethyl Ester
Chemical Formula:	C4H5CIF2O2

# SECTION 4: First aid measures 4.1 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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Eye contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Inmediately call a POISON CENTER or doctor/physician. 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. Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

# 4.2 Most important symptoms and effects, both acute and delayed No data available

### **4.3 Indication of any immediate medical attention and special treatment needed** No data available

SECTION 5: Firefighting measures	
5.1 Extinguishing media Suitable extinguishing media: Unsuitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide. Solid streams of water
5.2 Special hazards arising from the substance or mixture	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Hydrogen fluoride, Hydrogen chloride
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment
SECTION 6: Accidental release mea	asures
6.1 Personal precautions, protective equipment and emergency procedures	Use extra personal protective equipment (self-contained breathing apparatus). 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
6.2 Environmental precautions	Prevent product from entering drains
6.3 Methods and materials for containment and cleaning up	Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. 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. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.
6.4 Reference to other sections	For disposal see section 13.
SECTION 7: Handling and storage	
7.1 Precautions for safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfacesNo smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. 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.
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store locked up. Store away from incompatible materials such as oxidizing agents.
7.3 Specific end use(s)	No further relevant information available.

SECTION 8: Exposure controls/personal protection	
8.1 Control parameters	No data available
8.2 Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

SECTION	Q. Physical	and chemical	l nronartias
SECTON	9. PHVSICAL	and chemical	DIODEITIES

and the second		
0.1 Information on basic physical and chemical properties		
Physical state (20°C):	Liquid	
Form:	Clear	
Colour:	Colorless - Almost colorless	
Odour:	No data available	
pH:	No data available	
Melting point/freezing point:	No data available	
Boiling point/range:	96°C	
Flash point:	No data available	
Evaporation rate(Butyl Acetate=1):	No data available	
Flammability(solid, gas):	No data available	
Flammability or explosive limits:		
Lower:	No data available	
Upper:	No data available	
Vapour pressure:	No data available.	
Vapour density:	No data available	
Relative density:	1.27	
Solubility(ies):		
[Water]	No data available	
[Other solvents]	No data available	
Partition coefficient:	No data available	
n-octanol/water:		
Autoignition temperature:	No data available	
Decomposition temperature:	No data available	
Dynamic Viscosity:	No data available	
Kinematic viscosity:	No data available	
9.2 Other safety information	No data available	

SECTION 10: Stability and reactivity	
10.1 Reactivity	No data available
10.2 Chemical stability	Stable under proper conditions.
10.3 Possibility of hazardous reactions	No special reactivity has been reported.
10.4 Conditions to avoid	Spark, Open flame, Static discharge
10.5 Incompatible materials	Oxidizing agents, Strong bases

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Hydrogen fluoride, Hydrogen chloride

### SECTION 11: Toxicological information 1

1.1 Information on toxicological effects	
Acute Toxicity:	No data available
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available

# SECTION 12: Ecological information

12.1 Toxicity	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	
Log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law (PaM <sup>3</sup> /mol):	No data available
12.5 Results of PBT and vPvB assessme	ent
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects	No data available

### 12.6 Other adverse effects

SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system but exert extra care in igniting as this material is highly flammable. Observe all federal, state and local regulations when disposing of the substance

SECTION 14: Transport information	
14.1 UN number	2924
14.2 UN proper shipping name	
ADR/RID	Flammable liquid, corrosive, n.o.s
IMDG/IMO	Flammable liquid, corrosive, n.o.s
ICAO/IATA	Flammable liquid, corrosive, n.o.s
14.3 Transport hazard class(es)	
ADR/RID	3: Flammable liquid
Subsidiary risk:	8: Corrosive.
IMDG/IMO	3: Flammable liquid
Subsidiary risk:	8: Corrosive.
ICAO/IATA	3: Flammable liquid
Subsidiary risk:	8: Corrosive.
14.4 Packaging group	
ADR/RID	Ш
IMDG/IMO	Ш
ICAO/IATA	II
14.5 Environmental hazards	
Marine pollutant	-
14.6 Special precautions for user	No data available

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Substance of Very High Concern (SVHC) according to the Not listed REACH Regulations (EC) No.1907/2006

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information	
Prepared by:	TCI EUROPE N.V.
Issue date:	10/02/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of shorage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet