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## MATERIAL SAFETY DATA SHEET (MSDS)

## **SECTION 1. Product identifiers**

Product name: Ethyl-2-chloro propionate, 95% Product Code: E 1435 CAS No : 535-13-7

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

### **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture Flammable liquids, (Category 3) Skin irritation, (Category 2) Eye irritation, (Category 2) 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Hazard Statements H226 H315 H319 Precautionary Statements P210

P233 P240 P241

P303 + P361 + P353

P305 + P351 + P338

Supplemental Hazard Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Hazard Statements Precautionary Statements Supplemental Hazard Statements 2.3 Other hazards H226: Flammable liquid and vapor. H315: Causes skin irritation. H319: Causes serious eye irritation.

### Warning

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/ lighting/ equipment. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Warning none none none

none

2.3 Other nazards This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation

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(EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information: The substance/mixture does not contain components considered to have endocrine

disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

3.1 Substances	
Formula	: C5H9CIO2
Molecular weight	: 136,58 g/mol
CAS-No.	: 535-13-7
EC-No.	: 208-610-0

Component	Classification	Concentration
ethyl 2-chloropropionate		
CAS-No. 535-13-7	Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2;	<= 100 %
EC-No. 208-610-0	H226, H315, H319	

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

4.1 Description of first-aid measures General advice Show this material safety data sheet to the doctor in attendance. If inhaled After inhalation: fresh air. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. In case of eye contact After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses If swallowed After swallowing: immediately make victim drink water (two glasses at most). Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 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 Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 Special hazards arising from the substance or mixture Carbon oxides Hydrogen chloride gas Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions Do not let product enter drains. Risk of explosion. 6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area. 6.4 Reference to other sections For disposal see section 13. **SECTION 7: Handling and storage** 7.1 Precautions for safe handling Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Storage class Storage class (TRGS 510): 3: Flammable liquids 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated SECTION 8: Exposure controls/personal protection 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Butoject® (KCL 898) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Latex gloves Minimum layer thickness: 0,6 mm Break through time: 30 min

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Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M) Body Protection Flame retardant antistatic protective clothing. Respiratory protection required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains. Risk of explosion. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties a) Physical state liquid b) Color No data available c) Odor No data available d) Melting No data available point/freezing point 146 - 149 °C - lit. e) Initial boiling point and boiling range f) Flammability (solid, No data available das) g) Upper/lower No data available flammability or explosive limits h) Flash point 38 °C i) Autoignition No data available temperature j) Decomposition No data available temperature k) Ph No data available I) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available m) Water solubility No data available n) Partition coefficient: No data available n-octanol/water o) Vapor pressure No data available 1,072 g/cm3 at 25 °C - lit. p) Density Relative density No data available q) Relative vapor No data available density r) Particle No data available characteristics s) Explosive properties No data available t) Oxidizing properties No data available 9.2 Other safety information No data available **SECTION 10: Stability and reactivity** 10.1 Reactivity Vapor/air-mixtures are explosive at intense warming. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature). 10.3 Possibility of hazardous reactions Violent reactions possible with: Oxidizing agents

alkalines

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<ul> <li>10.4 Conditions to avoid Heating.</li> <li>10.5 Incompatible materials No data available</li> <li>10.6 Hazardous decomposition products In the event of fire: see section 5</li> <li>SECTION 11: Toxicological information</li> <li>11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal of Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit Inhalation LC50 Rat: &gt; 50mg/L.</li> <li>Chronic Effects on Humans: CARCINOGENIC Eff Other Toxic Effects on Humans: Hazardous in ca Special Remarks on Toxicity to Animals: Not available.</li> <li>Special Remarks on other Toxic Effects on Humans: Special Remarks on other Toxic Effects on Humans:</li> <li>Special Remarks on the Humans:</li> <li>Specia</li></ul>	t: 2000mg/kg FFECTS: Classified None. by NTP, None ise of skin contact (irritant), of inhalation Not available.	e. by OSHA, None. by NIOSH.		
No data available				
12.3 Bioaccumulative potential No data available				
12.4 Mobility in soil				
No data available				
12.5 Results of PBT and vPvB assessment				
This substance/mixture contains no components	considered to be either persistent,			
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.				
12.6 Endocrine disrupting properties				
Product:				
Assessment : The substance/mixture doe considered to have endocrin according to REACH Article Delegated regulation (EU) 20 Regulation (EU) 2018/605 at	e disrupt <mark>in</mark> g properties 57(f) or Commission 017/2100 o <mark>r Comm</mark> ission			
12.7 Other adverse effects No data available				
SECTION 13: Disposal considerations				
13.1 Waste treatment methods No data available				
SECTION 14: Transport information				
14.1 UN number				
ADR/RID: 2935	IMDG: 2935	IATA: 2935		
14.2 UN proper shipping name				
ADR/RID : ETHYL 2-CHLOROPROPIONATE IMDG : ETHYL 2-CHLOROPROPIONATE				
IATA : Ethyl 2-chloropropionate				
14.3 Transport hazard class(es)				
ADR/RID: 3	IMDG: 3	IATA: 3		
14.4 Packaging group				
ADR/RID: III	IMDG: III	IATA: III		
14.5 Environmental hazards	MDC Marine nelliterti re	14 74		
ADR/RID: no 14.6 Special precautions for user	IMDG Marine pollutant: no	IATA: no		
Tunnel restriction code : (D/E)				

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10.4 Conditions to avoid

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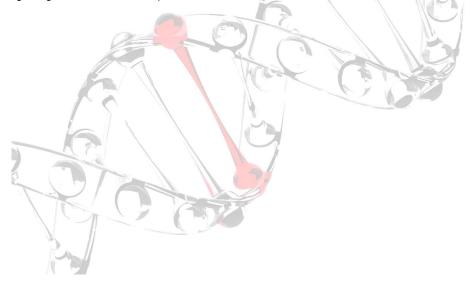
Further information : No data available

### **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. National legislation Seveso III: Directive 2012/18/EU of the P5c FLAMMABLE LIQUIDS European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Other regulations Take note of Dir 94/33/EC on the protection of young people at work. 15.2 Chemical Safety Assessment For this product a chemical safety assessment was not carried out

### **SECTION 16: Other Information**

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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