CI TCI EUROPE N.V.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

SECTION 1: Identification of the	e substance/mixture and of the company/undertaking
1.1 Product identifiers	
Product name:	1,2-Dibromo-3-chloropropane
Product code:	C0806
1.2 Relevant identified uses of the s Identified uses:	substance or mixture and uses advised against Reagents.
4.2 Details of the sumplier of the set	
1.3 Details of the supplier of the saf Supplier:	iely uala sheet
TCI EUROPE N.V. Boerenveldseweg 6	
Haven 1063	
B-2070 Zwijndrecht	
Telephone: +32(0)3 735 07 E-mail: sales-eu@tcichemid	
1.4 Emergency telephone number:	+32(0)70 245 245
SECTION 2: Hazards identificat	
2.1 Classification of the substance	
Acute toxicity (Oral)	Category 3
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1A
Specific target organ toxicity - I Long-term aquatic hazard	Repeated exposure [Category 2] Organs Category 3
2.2 Label elements Pictograms or hazard symbols	
Pictograms or hazard symbols	
Pictograms or hazard symbols	Danger
Pictograms or hazard symbols	Danger H301-Toxic if swallowed.
Pictograms or hazard symbols	Danger
Pictograms or hazard symbols	Danger H301-Toxic if swallowed. H340-May cause genetic defects. H350-May cause cancer.
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Pictograms or hazard symbols Signal word Hazard statements Precautionary statements	Danger H301-Toxic if swallowed. H340-May cause genetic defects. H350-May cause cancer. H360F-May damage fertility. H373-May cause damage to organs through prolonged or repeated exposure. H412-Harmful to aquatic life with long lasting effects. P201-Obtain special instructions before use. P260-Do not breathe mist, vapours or spray. P270-Do not eat, drink or smoke when using this product. P280-Wear protective gloves, protective clothing, face protection.
Pictograms or hazard symbols Signal word Hazard statements Precautionary statements 2.3 Other hazards	Danger H301-Toxic if swallowed. H340-May cause genetic defects. H350-May cause cancer. H360F-May damage fertility. H373-May cause damage to organs through prolonged or repeated exposure. H412-Harmful to aquatic life with long lasting effects. P201-Obtain special instructions before use. P260-Do not breathe mist, vapours or spray. P270-Do not eat, drink or smoke when using this product. P280-Wear protective gloves, protective clothing, face protection. P301+P310+P330-IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth P308+P313-IF exposed or concerned: Get medical advice or attention.
Pictograms or hazard symbols Signal word Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessed	Danger H301-Toxic if swallowed. H340-May cause genetic defects. H350-May cause cancer. H360F-May damage fertility. H373-May cause damage to organs through prolonged or repeated exposure. H412-Harmful to aquatic life with long lasting effects. P201-Obtain special instructions before use. P260-Do not breathe mist, vapours or spray. P270-Do not eat, drink or smoke when using this product. P280-Wear protective gloves, protective clothing, face protection. P301+P310+P330-IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth P308+P313-IF exposed or concerned: Get medical advice or attention.
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SECTION 3: Composition/information on ingredients

1,2-Dibromo-3-chloropropane
>98.0%(GC)
96-12-8
202-479-3
1,2-Dibromopropyl Chloride, 3-Chloro-1,2-dibromopropane, 3-Chloropropylene Bromide
C ₃ H ₅ Br ₂ Cl

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. Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention. Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. 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 chloride, Hydrogen bromide	
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: Remove movable containers 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 personal protective equipment. 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 a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). 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 flames and hot surfaces. 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 all contact!	
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.	

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SECTION 9:	Physical	and cl	hemical	properties

.1 Information on basic physical and chemical properties			
Physical state (20°C):	Liquid		
Form:	Clear		
Colour:	Colorless - Slightly pale yellow		
Odour:	Pungent		
pH:	No data available		
Melting point/freezing point:	5°C		
Boiling point/range:	200°C		
Flash point:	77°C		
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:	77Pa/20°C		
Vapour density:	2.09		
Relative density:	2.08		
Solubility(ies):			
[Water]	Very slightly soluble (1230mg/L, 20°C)		
[Other solvents]			
Miscible:	Acetone		
Partition coefficient:	2.96		
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	Open flame		

10.5 Incompatible materials Oxidizing agents, Bases, Metals

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects	6
Acute Toxicity:	ihl-rat LC50:98 mg/m ³ /4H
	ipr-mus LD50:123 mg/kg
	orl-rat LD50:170 mg/kg
	skn-rbt LD50:1400 mg/kg
Skin corrosion/irritation:	skn-rbt 10 g SEV
Serious eye damage/irritation:	eye-rbt 1 % MLD
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	dni-hmn-hla 10 mmol/L
	mmo-sat 500 ng/plate (-S9)
	mmo-sat 10 nL/well (+S9)
Carcinogenicity:	ihl-rat TCLo:600 pph/6H/2Y-I
	orl-rat TDLo:5475 mg/kg/73W-I
IARC =	Group 2B (Possibly carcinogenic to humans)
NTP =	b (Reasonably anticipated to be carcinogens)
Reproductive toxicity:	orl-rat TDLo: 200 mg/kg (1D male)
	ihl-rat TCLo:1 ppm/6H (4W male)
	orl-rat TDLo:500 mg/kg (6-15D preg)
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	TX8750000

SECTION 12: Ecological information

48h LC50:35 ppm (Oryzias latipes)
96h LC50:39 mg/L (Oryzias latipes)
48h EC50:19 mg/L (Daphnia magna)
72h EC50:20 mg/L (Selenastrum capricornutum)
No data available
3.6 - 17 (conc. 300 ppb) , 4 - 19 (conc. 30 ppb)
2.96
No data available
15
sment
Not applicable
Not applicable
No data available

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. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport informat	ion
14.1 UN number	2872
14.2 UN proper shipping name	
ADR/RID	Dibromochloropropanes
IMDG/IMO	Dibromochloropropanes
ΙCAO/ΙΑΤΑ	Dibromochloropropanes
14.3 Transport hazard class(es)	
ADR/RID	6.1: Toxic substance
IMDG/IMO	6.1: Toxic substance
ICAO/IATA	6.1: Toxic substance
14.4 Packaging group	
ADR/RID	III
IMDG/IMO	III
ICAO/IATA	III
14.5 Environmental hazards	
Marine pollutant	-
14.6 Special precautions for user	No data available
SECTION 15: Regulatory informa	ation
	al regulations/legislation specific for the substance or mixture (SVHC) according to the Not listed
15.2 Chemical safety assessment	A chamical safety assessment has not been carried out

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 storage. 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