TCI EUROPE N.V.

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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revis	ion number: 1	Revision date: 10/02/2018
SECTION 1: Identification of the su	bstance/mixture and of the company/undertaking	
1.1 Product identifiers Product name: Product code:	Cyclohexanecarbonyl Chloride C0685	
1.2 Relevant identified uses of the subs Identified uses:	t ance or mixture and uses advised against Reagents.	
1.3 Details of the supplier of the safety of Supplier: TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.		
1.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification		
 2.1 Classification of the substance or m Corrosive to metals Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements 	Category 1 Category 1B Category 1	
Pictograms or hazard symbols		
Signal word	Danger	
Hazard statements Precautionary statements	 H290-May be corrosive to metals. H314-Causes severe skin burns and eye damage. P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face protection P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NO POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off ir Rinse skin with water or shower. Immediately call a POISON CE clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: Rinse cautiously with wate lenses, if present and easy to do. Continue rinsing. Immediately 	DT induce vomiting. Immediately call a nmediately all contaminated clothing. NTER or doctor. Wash contaminated I keep comfortable for breathing. er for several minutes. Remove contact
2.3 Other hazards Results of PBT and vPvB assessmen		
PBT: vPvB:	Not applicable Not applicable	

SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	Cyclohexanecarbonyl Chloride
Percent:	>98.0%(GC)
CAS RN:	2719-27-9
EC-No:	220-322-7
Synonyms:	Hexahydrobenzoyl Chloride
Chemical Formula:	C7H11CIO

SECTION 4: First aid measures 4.1 Description of first aid measures Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Inhalation: POISON CENTER or doctor/physician. Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician. Eye contact: 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. Rinse mouth. Do NOT induce vomiting. 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, carbon dioxide. 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
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 me	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. Do not allow contact with water. 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 contact with skin, eyes and clothing. May develop pressure. Open carefully. Use corrosive resistant equipment.
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive
7.3 Specific end use(s)	No further relevant information available.
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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 9: Physical and chemical properties

9.1 Information on basic physical and ch	nemical properties
Physical state (20°C):	Liquid
Form:	Clear
Colour:	Colorless - Slightly pale yellow
Odour:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/range:	185°C
Flash point:	66°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:	No data available.
Vapour density:	No data available
Relative density:	1.08
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	Decomposes in contact with water and liberates toxic gases.	
10.4 Conditions to avoid	Open flame, Moisture	
10.5 Incompatible materials	Oxidizing agents, Bases, Water	

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

SECTION 11: Toxicological information

11.1 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
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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 ³ /mol):	No data available
12.5 Results of PBT and vPvB assessme	ent
PBT:	Not applicable
vPvB:	Not applicable

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

No data available

SECTION 14: Transport information

14.1 UN number	3265
14.2 UN proper shipping name	
ADR/RID	Corrosive liquid, acidic, organic, n.o.s
IMDG/IMO	Corrosive liquid, acidic, organic, n.o.s
ICAO/IATA	Corrosive liquid, acidic, organic, n.o.s
14.3 Transport hazard class(es)	
ADR/RID	8: Corrosive
IMDG/IMO	8: Corrosive
ICAO/IATA	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 spec	cific for the substance or mixture
Water Hazard Classes (WGK) :	Class 1 - Low hazard to waters
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006	Not listed
15.2 Chemical safety assessment	A chemical safety assessment has not been carried out.
SECTION 16: Other information	

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Issue date:	10/02/2018
	asis of the information we could obtained, however, any warranty shall not be given regarding the data

The products are supposed to be used promptly after purchase in consideration of safety. Some new 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 "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration 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