**CI**<u>TCI EUROPE N.V.</u>

## SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

	ision number: 1 Revision date: 10/02/201
	ubstance/mixture and of the company/undertaking
1.1 Product identifiers	
Product name:	1,3-Dicyclohexylimidazolium Tetrafluoroborate
Product code:	D3850
1.2 Relevant identified uses of the sub- Identified uses:	stance or mixture and uses advised against Reagents.
1.3 Details of the supplier of the safety	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@tcichemicals	
I.4 Emergency telephone number:	+32(0)70 245 245
SECTION 2: Hazards identification 2.1 Classification of the substance or r	
Acute toxicity (Oral)	Category 4
Skin corrosion/irritation	Category 1C
Serious eye damage/eye irritation	Category 1
2.2 Label elements Pictograms or hazard symbols Signal word Hazard statements	Danger H302-Harmful if swallowed. H314-Causes severe skin burns and eye damage.
Precautionary statements	P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face protection.
	<ul> <li>P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.</li> <li>P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.</li> <li>P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.</li> <li>P305+P351+P338+P310-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact</li> </ul>
	<ul> <li>P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.</li> <li>P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.</li> <li>P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.</li> <li>P305+P351+P338+P310-IF IN EYES: 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.</li> </ul>
2.3 Other hazards Results of PBT and vPvB assessme	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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.
	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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.
Results of PBT and vPvB assessme PBT: vPvB:	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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.
Results of PBT and vPvB assessme PBT: vPvB: SECTION 3: Composition/information	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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.
Results of PBT and vPvB assessme PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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. <b>nt</b> Not applicable Not applicable
Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components:	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: 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. nt Not applicable Not applicable 1,3-Dicyclohexylimidazolium Tetrafluoroborate
Results of PBT and vPvB assessme PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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. <b>nt</b> Not applicable Not applicable 1,3-Dicyclohexylimidazolium Tetrafluoroborate >98.0%(HPLC)(N)
Results of PBT and vPvB assessmer PBT: vPvB: <u>SECTION 3: Composition/informat</u> 3.1 Substances Components: Percent:	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: 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. nt Not applicable Not applicable 1,3-Dicyclohexylimidazolium Tetrafluoroborate
Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN: Chemical Formula:	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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. Not applicable Not applicable Not applicable 1,3-Dicyclohexylimidazolium Tetrafluoroborate >98.0%(HPLC)(N) 286014-38-8 C <sub>15</sub> H <sub>25</sub> BF <sub>4</sub> N <sub>2</sub>
Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN:	P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: 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. <b>nt</b> Not applicable Not applicable 1,3-Dicyclohexylimidazolium Tetrafluoroborate >98.0%(HPLC)(N) 286014-38-8

SECTION 4: First aid measures	
4.1 Description of first aid measures	Demove vistim to freeh eir and keen at reat in a position comfortable for breathing. Immediately call a
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/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.
Ingestion	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 effect No data available	ts, both acute and delayed
4.3 Indication of any immediate medical No data available	l attention and special treatment needed
SECTION 5: Firefighting measures	
5.1 Extinguishing media	
Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
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, Nitrogen oxides (NOx), Hydrogen fluoride, Boron oxides
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. Entry to
6.2 Environmental precautions	Prevent product from entering drains
6.3 Methods and materials for containment and cleaning up	Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
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 dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust 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 and dark 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/per	sonal protection
8.1 Control parameters	No data available
	Install a closed system or local exhaust. Also install safety shower and eye bath.
8.2 Exposure controls	
8.2 Exposure controls Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators
Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

D3850	1,3-Dicyclohexylimidazolium	Page 2 of 5
00000	r,o Dicyclonexymmadzonam	-
	Tetrafluoroborate	

Г

## SECTION 9: Physical and chemical properties

9.1 Information on basic physical and cl	nemical properties
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Very pale yellow
Odour:	No data available
pH:	No data available
Melting point/freezing point:	174°C
Boiling point/range:	No data available
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:	No data available
Solubility(ies):	
[Water]	No data available
[Other solvents]	
Soluble:	Methanol
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	No data available	
10.5 Incompatible materials	Oxidizing agents, Acids	

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen fluoride, Boron oxides

SECTION 11: Toxicological information		
11.1 Information on toxicological effects	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	

D3850	1,3-Dicyclohexylimidazolium	Page 3 of 5
	Tetrafluoroborate	

SECTION 12: Ecological informat	tion
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 assess	sment
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects	No data available
SECTION 13: Disposal considera	tions
13.1 Waste treatment methods	
	nsult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when
SECTION 14: Transport informati	ion
14.1 UN number	1759
14.2 UN proper shipping name	
ADR/RID	Corrosive solid, n.o.s
IMDG/IMO	Corrosive solid, n.o.s
ICAO/IATA	Corrosive solid, 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	

ICAO/IATA	Ш
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

Ш

15.2 Chemical safety assessment

IMDG/IMO

A chemical safety assessment has not been carried out.

1,3-Dicyclohexylimidazolium Tetrafluoroborate

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 "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