**C**I TCI EUROPE N.V.

## SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Rev	ision number: 1	<b>Revision date:</b> 10/02/2018
SECTION 1: Identification of the s	ubstance/mixture and of the company/underta	aking
1.1 Product identifiers		
Product name:	N-(tert-Butoxycarbonyl)-trans-4-(p-toluenesulfonylox	xy)-L-proline Methyl Ester
Product code:	B5247	
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	<sup>,</sup> data sheet	
Supplier:		
TCI EUROPE N.V. Boerenveldseweg 6		
Haven 1063		
B-2070 Zwijndrecht		
Telephone: +32(0)3 735 07 00	1	
E-mail: sales-eu@tcichemical	s.com	
1.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification	1	
2.1 Classification of the substance or	mixture	
Skin corrosion/irritation	Category 2	
Serious eye damage/eye irritation	Category 2	
2.2 Label elements Pictograms or hazard symbols		
Signal word	Warning	
Hazard statements	H315-Causes skin irritation.	
Precautionary statements	H319-Causes serious eye irritation. P264-Wash hands and face thoroughly after handlin P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Get medical advice or attention. Take off contaminat P305+P351+P338+P337+P313-IF IN EYES: Rinse of contact lenses, if present and easy to do. Continue r or attention.	Wash with plenty of water. If skin irritation occurs: ted clothing and wash it before reuse. cautiously with water for several minutes. Remove
2.3 Other hazards	or allemion.	
Results of PBT and vPvB assessme	nt	
PBT:	Not applicable	
vPvB:	Not applicable	
SECTION 3: Composition/informa	tion on ingredients	
3.1 Substances		
Components:	N-(tert-Butoxycarbonyl)-trans-4-(p-toluenesulfonylox	xy)-L-proline Methyl Ester
Percent:	>98.0%(HPLC)(N)	<i>y</i> ) = p
CAS RN:	88043-21-4	
Synonyms:	(2S,4R)-1-tert-Butyl 2-Methyl 4-(Tosyloxy)pyrrolidine	e-1,2-dicarboxylate, (4R)-4-TsO-N-Boc-Pro-OMe,
	N-Boc-trans-4-(p-tosyloxy)-L-proline Methyl Ester	
Chemical Formula:	C18H25NO7S	
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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. Get medical advice/attention if you feel unwell.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion:	Get medical advice/attention if you feel unwell. Rinse mouth.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

**<sup>4.2</sup> 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:	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), Sulfur 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 mea	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 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	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 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 refrigerator. Store under inert gas. Store away from incompatible materials such as oxidizing agents. Heat-sensitive, Air-sensitive	
7.3 Specific end use(s)	No further relevant information available.	
SECTION 8: Exposure controls/pers	sonal protection	
8.1 Control parameters	No data available	
8.2 Exposure controls	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.	
Respiratory protection: Hand protection: Eye protection: Skin and body protection:	Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires.	

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## SECTION 9: Physical and chemical properties

SECTION 9. Physical and chemical	
9.1 Information on basic physical and cl	
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Pale yellow
Odour:	No data available
pH:	No data available
Melting point/freezing point:	79°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:	Acetone
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	

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Sulfur oxides

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No data available	
No data available	
	No data available No data available

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SECTION 12: Ecological informat	ION
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 assess	ment
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects	No data available
SECTION 13: Disposal considerat	tions
Recycle to process, if possible. Con and burn in a chemical incinerator e disposing of the substance.	sult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent quipped with an afterburner and scrubber system. Observe all federal, state and local regulations when
SECTION 14: Transport informati	on
14.1 UN number	Not listed
14.2 UN proper shipping name	
ADR/RID	Not listed
IMDG/IMO	Not listed
ICAO/IATA	Not listed
14.3 Transport hazard class(es)	
ADR/RID	Does not correspond to the classification standard of the United Nations
IMDG/IMO	Does not correspond to the classification standard of the United Nations
ICAO/IATA	Does not correspond to the classification standard of the United Nations
14.4 Packaging group	
ADR/RID	
ADR/RID IMDG/IMO	
ADR/RID IMDG/IMO ICAO/IATA	

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 for 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

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