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

## SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revis	ion number: 1.1	Revision date: 10/02/2018
SECTION 1: Identification of the su	Ibstance/mixture and of the company/undertaking	
1.1 Product identifiers		
Product name:	(R)-(-)-1,1'-Binaphthyl-2,2'-diyl Bis(trifluoromethanesulfonate)	
Product code:	B2230	
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 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 n		
Skin corrosion/irritation	Category 1B	
Serious eye damage/eye irritation	Category 1	
	Descer	
Signal word	Danger	
Hazard statements Precautionary statements	H314-Causes severe skin burns and eye damage. P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face protectior P301+P330+P331+P310-IF SWALLOWED: Rinse mouth. Do NG 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 wat 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 assessme		
PBT:	Not applicable	
vPvB:	Not applicable	
SECTION 3: Composition/informat	ion on ingredients	
3.1 Substances	<i>V</i>	
Components:	(R)-(-)-1,1'-Binaphthyl-2,2'-diyl Bis(trifluoromethanesulfonate)	
Percent:	>96.0%(HPLC)	
CAS RN:	126613-06-7	
Synonyms:	(R)-(-)-1,1'-Bi-2-naphthol Bis(trifluoromethanesulfonate)	
Chemical Formula:	C22H12F6O6S2	

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	Bis(trifluoromethanesulfonate)	

SECTION 4: First aid measures	
4.1 Description of first aid measures	s
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. 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:	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, Hydrogen fluoride, 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	
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 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/pers	sonal 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:	Dust 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: Eye protection: Skin and body protection:	Impervious gloves. Safety goggles. A face-shield, if the situation requires. Impervious protective clothing. Protective boots, if the situation requires.

B2230	(R)-(-)-1,1'-Binaphthyl-2,2'-diyl	
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	Bis(trifluoromethanesulfonate)	
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## SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties

9.1 Information on basic physical and ch	nemical properties
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Slightly pale yellow
Odour:	No data available
pH:	No data available
Melting point/freezing point:	85°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]	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	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, Hydrogen fluoride, Sulfur oxides

SECTION 11: Toxicological informa	tion	
11.1 Information on toxicological effect		
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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	Bis(trifluoromethanesulfonate)	

SECTION 12: Ecological informat 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	ment
PBT:	Not applicable
vPvB:	Not applicable
12.6 Other adverse effects	No data available
SECTION 13: Disposal considera	tions
SECTION 13: Disposal considera 13.1 Waste treatment methods	
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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 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