SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revis	sion number: 1		Revision date: 10/03/2018
SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1 Product identifiers			
Product name:	Glycopyrrolate		
Product code:	G0392		
1.2 Relevant identified uses of the subs Identified uses:	tance or mixture and uses ad Reagents.	dvised against	
1.3 Details of the supplier of the safety of Supplier:	lata sheet		
TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals.	com		
1.4 Emergency telephone number:	+32(0)70 245 245		
SECTION 2: Hazards identification			
2.1 Classification of the substance or m	ixture		
Acute toxicity (Oral)		Category 4	
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	H302-Harmful if swallowed. H315-Causes skin irritation. H319-Causes serious eye irr	itation.	
Precautionary statements	P270-Do not eat, drink or sm P264-Wash hands and face P280-Wear protective gloves P301+P312+P330-IF SWALI mouth. P302+P352+P332+P313+P3 Get medical advice or attenti P305+P351+P338+P337+P3	oke when using this product. thoroughly after handling.	vater. If skin irritation occurs: it before reuse. for several minutes. Remove
2.3 Other hazards			
Results of PBT and vPvB assessment	t		
PBT:	Not applicable		
vPvB:	Not applicable		

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SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	Glycopyrrolate
Percent:	>98.0%(HPLC)(T)
CAS RN:	596-51-0
EC-No:	209-887-0
Synonyms:	3-(2-Cyclopentyl-2-hydroxy-2-phenylacetoxy)-1,1-dimethylpyrrolidinium Bromide
Chemical Formula:	C ₁₉ H ₂₈ BrNO ₃

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:	Call a POISON CENTER or doctor/physician 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.

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	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.		
substance or mixture	Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen bromide		
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according		
ere stattee tet menginete	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 measures			
6.1 Personal precautions, protective	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to		
equipment and emergency procedures	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	Current durat to collect it into an elisicate entering to bing one optical dispersion it. Adhered on collected		
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.		
containment and cleaning up			
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,	Keep container tightly closed. Store in a refrigerator. Store under inert gas.		
including any incompatibilities	Protect from moisture. Store away from incompatible materials such as oxidizing agents.		
	Heat-sensitive, Hygroscopic		
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 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.	

SECTION 9: Physical and chemical properties

Section 7.1 Hysical and chemical	
9.1 Information on basic physical and cl	
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Almost white
Odour:	No data available
pH:	No data available
Melting point/freezing point:	195°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]	Soluble
[Other solvents]	
Soluble:	Alcohols
Insoluble:	Ether
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	y
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), Hydrogen bromide

SECTION 11: Toxicological information 11.1 Information on toxicological effects

1.1 Information on toxicological effect	S	
Acute Toxicity:	orl-rat LD50:709 mg/kg	
	ipr-rat LD50:196 mg/kg	
	ivn-rbt LD50:29100 ug/kg	
	scu-rat LD50:833 mg/kg	
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:	orl-mus TDLo: 10 mg/kg (1D post)	
STOT-single exposure:	No data available	
STOT-repeated exposure:	No data available	
Aspiration hazard:	No data available	
RTECS Number:	UY4337630	

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 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 considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and 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 information	ion		
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	-		
IMDG/IMO			
ΙCAO/ΙΑΤΑ	-		
14.5 Environmental hazards			
Marine pollutant	-		
14.6 Special precautions for user	No data available		
SECTION 15: Regulatory informa	tion		
15.1 Safety, health and environmenta Substance of Very High Concern REACH Regulations (EC) No.190			
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:	10/03/2018

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