## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## **1.1 Product identifier**

Trade name Product code EC-No.	:	1-Bromo-3-chlorobenzene B0570 203-575-8		
<b>1.2 Relevant identified uses of the s</b> Use of the Substance/Mixture		ance or mixture and uses advised against Use as laboratory reagent		
1.3 Details of the supplier of the safety data sheet				
Company	:	TCI EUROPE N.V.		

Company	:	TCI EUROPE N.V.
Address	:	Boereveldseweg 6 - Haven 1063, B-2070 Zwijndrecht, Belgium
Telephone	:	+32 (0)3 735 07 00
Telefax	:	+32 (0)3 735 07 01
E-mail address of person respon- sible for the SDS	:	sales-eu@tcichemicals.com
1.4 Emergency telephone number		
Emergency telephone number	:	+44 844 892 0111

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.

#### 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:				
Signal word	:	Warning			
Hazard statements	:	H315 Cause	s skin irritation.		
		H319 Cause	s serious eye irritation.		
Precautionary statements	:	Prevention:			
			skin thoroughly after handling. rotective gloves/ eye protection/ face protection.		
		Response:			
		P302 + P352	IF ON SKIN: Wash with plenty of water.		
		P332 + P313 tion.	If skin irritation occurs: Get medical advice/ atten-		
		P337 + P313 tion.	If eye irritation persists: Get medical advice/ atten-		
		P362 + P364 reuse.	Take off contaminated clothing and wash it before		

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

## 3.1 Substances

	1-Bromo-3-chlorobenzene 203-575-8
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#### Components

Chemical name	CAS RN EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
1-Bromo-3-chlorobenzene	108-37-2 203-575-8	>= 90 - <= 100	

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

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If inhaled :	Remove person to fresh air and keep comfortable for breathing Get medical advice/ attention if you feel unwell.
In case of skin contact :	Take off all contaminated clothing immediately. Wash off with plenty of water. If skin irritation occurs: Get medical advice/ attention.
In case of eye contact :	Rinse with plenty of water. If easy to do, remove contact lens, if worn. If eye irritation persists: Get medical advice/ attention.
If swallowed :	Get medical advice/ attention. Rinse mouth.
If swallowed :	

## 4.2 Most important symptoms and effects, both acute and delayed

None known.

**4.3 Indication of any immediate medical attention and special treatment needed** None known.

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media		
Suitable extinguishing media	:	Dry powder, Foam, Water spray, Carbon dioxide (CO2)
5.2 Special hazards arising from the	su	bstance or mixture
Specific hazards during fire- fighting	:	No information available.
5.3 Advice for firefighters		
Special protective equipment for firefighters	:	Use personal protective equipment.
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circum- stances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective	equipment and emergency procedures			
Personal precautions	: Wear suitable 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				
Environmental precautions	: Prevent product from entering drains.			
6.3 Methods and material for contain	ment and cleaning up			
Methods for cleaning up	: Collect as much of the spill as possible with a suitable absorbent material.			
6.4 Reference to other sections				
See sections: 7, 8, 11, 12 and 13.				
SECTION 7: Handling and storage				
7.1 Precautions for safe handling				
Technical measures	<ul> <li>Prevent generation of vapour or mist.</li> <li>Take precautionary measures against static discharge.</li> <li>Use explosion-proof equipment.</li> </ul>			
Local/Total ventilation	: Ensure adequate ventilation. Use a local exhaust ventilation.			
Advice on safe handling	<ul> <li>Avoid contact with skin, eyes and clothing.</li> <li>Wear personal protective equipment.</li> <li>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>Do not subject to grinding, shock or friction.</li> <li>Wash hands and face thoroughly after handling.</li> </ul>			
7.2 Conditions for safe storage, including any incompatibilities				
Requirements for storage areas and containers	<ul> <li>Keep container tightly closed. Store in a cool and shaded area. Keep in a well-ventilated place.</li> </ul>			

## 7.3 Specific end use(s)

Storage class (TRGS 510)

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Specific use(s)	:	No information available.

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## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

#### **Engineering measures**

Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment		
Eye/face protection	:	Safety glasses, Face-shield
Hand protection Skin and body protection		Protective gloves Protective suit
Respiratory protection	:	Gas mask

\*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state Colour Odour Odour Threshold	:	liquid colourless - yellow No data available No data available
Melting point/freezing point Boiling point/boiling range Flammability Upper explosion limit/Upper flammability limit Lower explosion limit/Lower flammability limit Flash point	:	No data available 196 °C No data available No data available No data available 80 °C
Auto-ignition point Decomposition temperature pH Viscosity Viscosity, dynamic	:	No data available No data available No data available No data available
Viscosity, kinematic Solubility(ies) Water solubility Solubility in other solvents	: : :	No data available No data available No data available
Partition coefficient: n- octanol/water (log value) Vapour pressure Relative density Relative vapour density Particle characteristics	:	No data available No data available 1,63 No data available No data available
9.2 Other information Refractive index	:	1,58
Molecular weight	:	191,45 g/mol

## **SECTION 10: Stability and reactivity**

10.1 Reactivity						
No data available						
10.2 Chemical stability						
Stable under normal conditions.						
10.3 Possibility of hazardous reactions						
Hazardous reactions	:	None under normal processing.				
10.4 Conditions to avoid						
Conditions to avoid	:	Electrical spark, Open flame				
10.5 Incompatible materials						
Materials to avoid	:	Oxidizing agents, Strong bases,				

## 10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO2), Hydrogen chloride gas, hydrogen bromide

## **SECTION 11: Toxicological information**

1.1 Information on hazard classes a Acute toxicity	is d :	lefined in Regulation (EC) No 1272/2008 No information available.
Skin corrosion/irritation		
Product:		
Result	:	Skin irritation
Components:		
1-Bromo-3-chlorobenzene:		
Result	:	Skin irritation
Serious eye damage/eye irritatio	on	
Product:		
Result	:	Eye irritation
Components:		
1-Bromo-3-chlorobenzene:		
Result	:	Eye irritation
Respiratory or skin sensitisa- tion	:	No information available.
Germ cell mutagenicity	:	No information available.
Carcinogenicity	:	No information available.
Reproductive toxicity	:	No information available.
STOT - single exposure	:	No information available.
STOT - repeated exposure	:	No information available.
Repeated dose toxicity	:	No information available.
Aspiration hazard	:	No information available.
RTECS No.	:	CY9005000 (1-Bromo-3-chlorobenzene)

## 11.2 Information on other hazards

Endocrine disrupting properties

Product:	
Assessment	: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Com-

mission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

No data available

## 12.2 Persistence and degradability No data available

**12.3 Bioaccumulative potential** No data available

**12.4 Mobility in soil** No data available

#### 12.5 Results of PBT and vPvB assessment Product: Assessment This substance/mixture contains no components considered to be : either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 12.6 Endocrine disrupting properties Product: Assessment The substance/mixture does not contain components considered to : have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. 12.7 Other adverse effects No data available **SECTION 13: Disposal considerations** 13.1 Waste treatment methods Product Disposal in accordance with local and national regulations. : Take precautions against ignition or explode. Entrust disposal to a licensed waste disposal company. Contaminated packaging Disposal in accordance with local and national regulations. : Before disposal of used container, remove contents completely.

## **SECTION 14: Transport information**

## 14.1 UN number or ID number

	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.2	2 UN proper shipping name		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.3	3 Transport hazard class(es)		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	ΙΑΤΑ	:	Not regulated as a dangerous good
14.4	4 Packing group		
	ADR	:	Not regulated as a dangerous good
	IMDG	:	Not regulated as a dangerous good
	IATA (Cargo)	:	Not regulated as a dangerous good
	IATA (Passenger)	:	Not regulated as a dangerous good
14.	5 Environmental hazards		
	Not regulated as a dangerous go	od	
14.6	Special precautions for user		
	Remarks	:	Not classified as dangerous in the meaning of transport regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on the mar- ket and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) on substances that deplete the ozone layer	:	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	:	Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

# The components of this product are reported in the following inventories:

CH BAGREG	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AICS	:	Not in compliance with the inventory
DSL	:	None of the components of this product are on the Canadian DSL, but all are on the NDSL
		1-Bromo-3-chlorobenzene
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

## **SECTION 16: Other information**

## Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of In-

dustrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR -(Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

This SDS was prepared sincerely based on the information 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 operations, sufficient care should be taken, in addition to the safety measures suitable for the given 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.

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