**SAFETY DATA SHEET** 

According to 1907/2006/EC, Article 31

	vision number: 1	Revision date: 10/02/2018
SECTION 1: Identification of the s	ubstance/mixture and of the co	mpany/undertaking
1.1 Product identifiers		
Product name:	4-Butoxyphthalonitrile	
Product code:	B1353	
1.2 Relevant identified uses of the sub Identified uses:	stance or mixture and uses advised Reagents.	d against
1.3 Details of the supplier of the safet	v data sheet	
Supplier: TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063		
B-2070 Zwijndrecht Telephone: +32(0)3 735 07 0 E-mail: sales-eu@tcichemical		
1.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification	ז	
2.1 Classification of the substance or	mixture	
Acute toxicity (Oral)	Cate	gory 4
Acute toxicity (Dermal)	Cate	gory 4
Acute toxicity (Inhalation)	Cate	gory 4
Skin corrosion/irritation	Cate	gory 2
Serious eye damage/eye irritation	Cate	gory 2
2.2 Label elements		
Pictograms or hazard symbols		
	Warning	
Signal word	Warning H302+H312+H332-Harmful if swal	lowed in contact with skin or if inhaled
	H302+H312+H332-Harmful if swal	lowed, in contact with skin or if inhaled.
Signal word	H302+H312+H332-Harmful if swal H315-Causes skin irritation.	
Signal word Hazard statements	H302+H312+H332-Harmful if swal H315-Causes skin irritation. H319-Causes serious eye irritatior	
Signal word	H302+H312+H332-Harmful if swal H315-Causes skin irritation.	as/mist/vapours/spray.
Signal word Hazard statements	H302+H312+H332-Harmful if swal H315-Causes skin irritation. H319-Causes serious eye irritatior P261-Avoid breathing dust/fume/g	as/mist/vapours/spray. /hen using this product.
Signal word Hazard statements	H302+H312+H332-Harmful if swal H315-Causes skin irritation. H319-Causes serious eye irritatior P261-Avoid breathing dust/fume/g P270-Do not eat, drink or smoke w P280-Wear protective gloves, prot P302+P352+P312+P362+P364-IF	as/mist/vapours/spray. /hen using this product. ective clothing, eye protection. ON SKIN: Wash with plenty of soap and water. Call a POISON
Signal word Hazard statements	H302+H312+H332-Harmful if swal H315-Causes skin irritation. H319-Causes serious eye irritatior P261-Avoid breathing dust/fume/g P270-Do not eat, drink or smoke w P280-Wear protective gloves, prot P302+P352+P312+P362+P364-IF CENTER or doctor if you feel unwe	as/mist/vapours/spray. hen using this product. ective clothing, eye protection. ON SKIN: Wash with plenty of soap and water. Call a POISON ell. Take off contaminated clothing and wash it before reuse.
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Signal word Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessme	H302+H312+H332-Harmful if swal H315-Causes skin irritation. H319-Causes serious eye irritatior P261-Avoid breathing dust/fume/g P270-Do not eat, drink or smoke w P280-Wear protective gloves, prot P302+P352+P312+P362+P364-IF CENTER or doctor if you feel unwe P304+P340+P312-IF INHALED: R POISON CENTER or doctor if you P305+P351+P338+P337+P313-IF contact lenses, if present and easy or attention.	as/mist/vapours/spray. as/mist/vapours/spray. when using this product. ective clothing, eye protection. ON SKIN: Wash with plenty of soap and water. Call a POISON ell. Take off contaminated clothing and wash it before reuse. emove person to fresh air and keep comfortable for breathing. Call feel unwell. IN EYES: Rinse cautiously with water for several minutes. Remove
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SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	4-Butoxyphthalonitrile
Percent:	>96.0%(GC)
CAS RN:	81560-32-9
Synonyms:	4-Butoxy-1,2-dicyanobenzene
Chemical Formula:	C12H12N2O

SECTION 4: First aid m	easures
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SECTION 4. First alu measures	
4.1 Description of first aid measures	8
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact:	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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 substance or mixture	Carbon monoxide, carbon dioxide etc
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 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/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:	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:	Impervious gloves.	
Eye protection:	Safety goggles. A face-shield, if the situation requires.	
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.	

# SECTION 9: Physical and chemical properties

9.1 Information on basic physical and ch	nemical properties
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	Very pale yellow - Pale yellow
Odour:	No data available
pH:	No data available
Melting point/freezing point:	46°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	

10.6 Hazardous decomposition products Carbon monoxide, carbon dioxide etc

# SECTION 11: Toxicological information

11.1 Information on toxicological effects	i
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

## SECTION 12: Ecological information

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 assessme	ent
PBT:	Not applicable
vPvB:	Not applicable

#### 12.6 Other adverse effects

## 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.

No data available

SECTION 14: Transport information	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
ICAO/IATA	NOUTISTED
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	-
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 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