## PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



#### article number: **1YXY** Version: **1.0 en**

date of compilation: 2023-02-28

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

#### 1.1 Product identifier

Identification of the substance

Article number

## **PCBs Standard Solution** 8 PCBs in isooctane, 10 μg/ml

1YXY

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

Uses advised against:

Laboratory and analytical use Laboratory chemical

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household).

#### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data :Department Health, Safety and Environment sheet:

#### e-mail (competent person):

#### sicherheit@carlroth.de

#### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	2	Flam. Liq. 2	H225
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336
3.9	Specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
3.10	Aspiration hazard	1	Asp. Tox. 1	H304

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



article number: **1YXY** 

Section	Hazard class		Hazard class and category	Hazard statement
4.1A	Hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	Hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

#### Labelling

Signal word Danger

## Pictograms



#### Hazard statements

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P280 Wear protective gloves/protective clothing/eye protection/face protection

Hazardous ingredients for labelling:

Isooctane, Polychlorobiphenyls (PCB)

#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml

article number: **1YXY** 

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

#### 3.1 Substances

not relevant (mixture)

#### 3.2 Mixtures

#### Description of the mixture

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Isooctane	CAS No 540-84-1 EC No 208-759-1 Index No 601-009-00-8	99-<100	Flam. Liq. 2 / H225 Skin Irrit. 2 / H315 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		C(a) GHS-HC
Polychlorobiphenyls (PCB)	CAS No 1336-36-3 EC No 215-648-1 Index No 602-039-00-4	< 0,01	STOT RE 2 / H373 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		C GHS-HC

#### Notes

C(a): Mixture of isomers

C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers. GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of sub- stance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Polychlorobi- phenyls (PCB)	CAS No 1336-36-3	STOT RE 2; H373: C ≥ 0,005 %	-	-	
	EC No 215-648-1				

For full text of abbreviations: see SECTION 16

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

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### **Following inhalation**

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



#### article number: **1YXY**

#### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### **Following ingestion**

Rinse mouth. Do not induce vomiting. Observe aspiration hazard if vomiting occurs. Call a physician immediately.

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

Following inhalation: Drowsiness, Dizziness, Narcosis, Following skin contact: Irritation, After eye contact: Irritant effects, Following ingestion: Aspiration hazard

## 4.3 Indication of any immediate medical attention and special treatment needed

none

#### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapourair mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours may form explosive mixtures with air.

#### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), May produce toxic fumes of carbon monoxide if burning.

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

acc. to Regulation (EC) No. 1907/2006 (REACH)

## ® §ROTH

PCBs Standard Solution 8 PCBs in isooctane, 10 μg/ml

article number: **1YXY** 

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

6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. Danger of explosion.

#### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Provision of sufficient ventilation.

#### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

#### Measures to protect the environment

Avoid release to the environment.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml

article number: 1YXY

#### 7.2 Conditions for safe storage, including any incompatibilities Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

#### **Consideration of other advice:**

Ground/bond container and receiving equipment.

#### **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 2 - 8 °C

#### 7.3 Specific end use(s)

No information available.

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

#### 8.1 **Control parameters**

#### National limit values

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
GB	polychlorinated bi- phenyls (PCB)	1336-36- 3	WEL		0,1						EH40/ 2005

Notation

Ceiling-C STEL

Ceiling value is a limit value above which exposure should not occur Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8

TWA hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture									
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time			
Isooctane	540-84-1	DNEL	2.035 mg/ m <sup>3</sup>	human, inhalat- ory	worker (industry)	chronic - systemic effects			
Isooctane	540-84-1	DNEL	773 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects			

#### 8.2 **Exposure controls**

#### Individual protection measures (personal protective equipment)

#### **Eye/face protection**





acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



article number: 1YXY

Use safety goggle with side protection.

#### Skin protection



#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

NBR (Nitrile rubber)

#### material thickness

>0,3 mm

#### breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### • other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

#### **Respiratory protection**



Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

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

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

Physical state	liquid
Colour	colourless
Odour	like: - Gasoline
Melting point/freezing point	-107 °C
Boiling point or initial boiling point and boiling range	99,2 °C at 1.013 hPa
Flammability	flammable liquid in accordance with GHS criteria

acc. to Regulation (EC) No. 1907/2006 (REACH)

article number: 1YXY

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



Lower and upper explosion limit 45 g/m3 (LEL) - 290 g/m3 (UEL) / 1 vol% (LEL) - 6 vol% (UEL) Flash point -12 °C Auto-ignition temperature 418 °C (auto-ignition temperature (liquids and gases)) Decomposition temperature not relevant pH (value) not determined not determined Kinematic viscosity 0,5 mPa s at 20 °C Dynamic viscosity Solubility(ies) Water solubility (poorly soluble (1 till < 10 mg/l)) Partition coefficient Partition coefficient n-octanol/water (log value): this information is not available Vapour pressure 28 hPa at 20 °C Density and/or relative density 0,69 <sup>g</sup>/<sub>cm<sup>3</sup></sub> at 15 °C Density Relative vapour density 3,9 (air = 1) Particle characteristics not relevant (liquid) Other safety parameters Oxidising properties none 9.2 **Other information** Information with regard to physical hazard There is no additional information. classes: Other safety characteristics: 9 bar Maximum explosion pressure

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

#### 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition. Vapours may form explosive mixtures with air.

#### If heated

Risk of ignition.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml

article number: 1YXY

#### **10.3** Possibility of hazardous reactions

Violent reaction with: strong oxidiser

#### **10.4 Conditions to avoid** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- **10.5 Incompatible materials** different plastics
- **10.6** Hazardous decomposition products

Hazardous combustion products: see section 5.

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

#### Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful in contact with skin or if inhaled.

Acute toxicity								
Exposure route	Endpoint	Value	Species	Method	Source			
oral	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rat					
dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rabbit					
inhalation: vapour	LC50	>33,52 <sup>mg</sup> / <sub>l</sub> /4h	rat					

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Isooctane	540-84-1	oral	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rat
Isooctane	540-84-1	inhalation: va- pour	LC50	>33,52 <sup>mg</sup> / <sub>l</sub> / 4h	rat
Isooctane	540-84-1	dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rabbit

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.



acc. to Regulation (EC) No. 1907/2006 (REACH)

Germ cell mutagenicity

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml

article number: 1YXY



## Shall not be classified as germ cell mutagenic. **Carcinogenicity** Shall not be classified as carcinogenic. **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

#### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

#### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### **Aspiration hazard**

May be fatal if swallowed and enters airways.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

vomiting, aspiration hazard

#### • If in eyes

causes slight to moderate irritation

#### • If inhaled

drowsiness, dizziness, fatigue, narcosis

#### • If on skin

causes skin irritation

#### Other information

none

#### **11.2** Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge$  0,1%.

#### 11.3 Information on other hazards

There is no additional information.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (a	quatic toxicity (acute)								
Endpoint	Value	Species	Source	Exposure time					
LL50	18,4 <sup>mg</sup> / <sub>l</sub>	fish		96 h					
LC50	0,11 <sup>mg</sup> / <sub>l</sub>	fish		96 h					
EC50	0,4 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates		48 h					
EL50	2,4 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates		48 h					

#### PCBs Standard Solution 8 PCBs in isooctane, 10 $\mu g/ml$



article number: **1YXY** 

Aquatic toxicity (acute) of components of the mixture							
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time		
Isooctane	540-84-1	LL50	18,4 <sup>mg</sup> / <sub>l</sub>	fish	96 h		
Isooctane	540-84-1	LC50	0,11 <sup>mg</sup> / <sub>l</sub>	fish	96 h		
Isooctane	540-84-1	EC50	0,4 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h		
Isooctane	540-84-1	EL50	2,4 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h		

#### Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Isooctane	540-84-1	EL50	1,6 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	21 d
Isooctane	540-84-1	EC50	0,23 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	21 d

#### 12.2 Persistence and degradability

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	61,81 %	70 d
oxygen depletion	61,81 %	70 d

### Degradability of components of the mixture

Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
Isooctane	540-84-1	oxygen deple- tion	61,81 %	70 d		ECHA

#### 12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture						
Name of substance CAS No BCF Log KOW BOD5/COE						
Isooctane	540-84-1	231	4,08			

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

#### 12.7 Other adverse effects

Data are not available.

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



article number: 1YXY

## **SECTION 13: Disposal considerations**

#### Waste treatment methods 13.1



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

- HP 3 flammable
- HP 5 specific t HP 14 ecotoxic specific target organ toxicity (STOT)/aspiration toxicity

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

Π

Π

## **SECTION 14: Transport information**

#### 14.1 UN number or ID number ADRRID UN 1262 IMDG-Code UN 1262 ICAO-TI UN 1262 14.2 UN proper shipping name ADRRID OCTANES IMDG-Code OCTANES ICAO-TI Octanes 14.3 Transport hazard class(es) 3 ADRRID IMDG-Code 3 ICAO-TI 3 14.4 Packing group ADRRID Π

IMDG-Code ICAO-TI

# Safety data sheet Safety data sheet acc. to Regulation (EC) No. 1907/2006 (REACH)

### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml

article number: **1YXY** 

14.5	Environmental hazards	hazardous to the aquatic environment			
	Environmentally hazardous substance (aquatic environment):	Isooctane			
14.6	Special precautions for user				
	Provisions for dangerous goods (ADR) should be	complied within the premises.			
14.7	Maritime transport in bulk according to IMO i	nstruments			
	The cargo is not intended to be carried in bulk.				
14.8	Information for each of the UN Model Regulat	ions			
	Agreement concerning the International Carri	iage of Dangerous Goods by Road (ADR)Additional			
	Proper shipping name	OCTANES			
	Particulars in the transport document	UN1262, OCTANES, 3, II, (D/E), environmentally hazardous			
	Classification code	F1			
	Danger label(s)	3, "Fish and tree"			
	Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)			
	Excepted quantities (EQ)	E2			
	Limited quantities (LQ)	1 L			
	Transport category (TC)	2			
	Tunnel restriction code (TRC)	D/E			
	Hazard identification No	33			
	Emergency Action Code	3YE			
	Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information				
	Classification code	F1			
	Danger label(s)	3 Fish and tree			
	Environmental hazards	Yes Hazardous to water			
	Excepted quantities (EQ)	E2			
	Limited quantities (LQ)	1 L			
	Transport category (TC)	2			
	Hazard identification No	33			

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



article number: **1YXY** 

International Maritime Dangerous Goods Code (IMDG) - Additional information				
Proper shipping name	OCTANES			
Particulars in the shipper's declaration	UN1262, OCTANES, 3, II, -12°C c.c., MARINE POL- LUTANT			
Marine pollutant	yes (P) (hazardous to the aquatic environment)			
Danger label(s)	3, "Fish and tree"			
Special provisions (SP)	-			
Excepted quantities (EQ)	E2			
Limited quantities (LQ)	1 L			
EmS	F-E, S-E			
Stowage category	В			
International Civil Aviation Organization (ICA	D-IATA/DGR) - Additional information			
Proper shipping name	Octanes			
Particulars in the shipper's declaration	UN1262, Octanes, 3, II			
Environmental hazards	<b>Yes</b> (hazardous to the aquatic environment)			
Danger label(s)	3			
Excepted quantities (EQ)	E2			
Limited quantities (LQ)	1 L			

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

#### Seveso Directive

2012/	2012/18/EU (Seveso III)							
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements						
E1	environmental hazards (hazardous to the aquatic en- vironment, cat. 1)	100 200	56)					

#### Notation

56) Hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

#### **Deco-Paint Directive**

VOC content	99,99 % 689,9 <sup>g</sup> / <sub>l</sub>	
-------------	--	--

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



for releases to air

article number: **1YXY** 

Industrial Emissions Directive (IED)				
VOC content	99,99 %			
VOC content	689,9 <sup>g</sup> / <sub>l</sub>			

## Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

## Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Pollutant release and transfer registers (PRTR)					
Name of substance	CAS No	Remarks	Threshold		

		(kg/year)
Polychlorobiphenyls (PCB)	1336-36-3	0,1

#### Water Framework Directive (WFD)

#### List of pollutants (WFD) **CAS No** Listed in Name of substance Name acc. to inventory **Remarks** Polychlorobiphenyls (PCB) Organohalogen compounds and a) substances which may form such compounds in the aquatic environment Polychlorobiphenyls (PCB) Substances and preparations, or a) the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrinerelated functions in or via the aquatic environment Polychlorobiphenyls (PCB) Persistent hydrocarbons and pera) sistent and bioaccumulable organic toxic substances

Legend

Indicative list of the main pollutants

#### Regulation on the marketing and use of explosives precursors

none of the ingredients are listed

#### **Regulation on drug precursors**

none of the ingredients are listed

#### Regulation on substances that deplete the ozone layer (ODS)

none of the ingredients are listed

#### Regulation concerning the export and import of hazardous chemicals (PIC)

chemicals subject to the international prior informed consent (PIC) procedure (the 'PIC procedure').

acc. to Regulation (EC) No. 1907/2006 (REACH)





#### article number: 1YXY

Name of substance	Name acc. to inventory	CAS No	Wt%	Category / subcat- egory	Use limita- tion
Polychlorobiphenyls (PCB)	polychlorinated biphenyls (PCB)	1336-36- 3	0,008	i	
Polychlorobiphenyls (PCB)	polychlorinated biphenyls (PCB)	1336-36- 3	0,008		

Legend i

Category: i - industrial chemical

#### **Regulation on persistent organic pollutants (POP)**

Name of substance	CAS No	Wt%	Type of registra- tion	Re- marks	Exemp- tions	Concen- tration limit
Polychlorobiphenyls (PCB)	1336-36-3	0,008	Annex I - A		A1-ex-08	
Polychlorobiphenyls (PCB)	1336-36-3	0,008	Annex III - A			
Polychlorobiphenyls (PCB)	1336-36-3	0,008	Annex IV			50 mg/kg

#### Legend

Without prejudice to Directive 96/59/EC, articles already in use at the time of the entry into force of this Regula-tion are allowed to be used. A1-ex-08

Member States shall identify and remove from use equipment (e.g. transformers, capacitors or other receptacles containing liquid stocks) containing more than 0,005 % PCBs and volumes greater than 0,05 dm3, as soon as possible but no later than 31 December 2025.

annex I - A Part A - Substances listed in the Convention and in the Protocol as well as substances listed only in the Convention annex III - A List of substances subject to release reduction provisions annex IV List of substances subject to waste management provisions set out in Article 7

#### National regulations(GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

none of the ingredients are listed

#### **Restrictions according to GB REACH, Annex 17**

Dangerous substances with re	angerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No	
PCBs Standard Solution	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3	
Isooctane	flammable / pyrophoric		40	

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### National inventories

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 $\mu$ g/ml



#### article number: 1YXY

Country	Inventory	Status	
AU	AIIC	all ingredients are listed	
CA	DSL	all ingredients are listed	
CN	IECSC	all ingredients are listed	
EU	ECSI	all ingredients are listed	
EU	REACH Reg.	not all ingredients are listed	
JP	CSCL-ENCS	not all ingredients are listed	
KR	KECI	all ingredients are listed	
MX	INSQ	all ingredients are listed	
NZ	NZIoC	not all ingredients are listed	
PH	PICCS	all ingredients are listed	
TR	CICR	not all ingredients are listed	
TW	TCSI	all ingredients are listed	
US	TSCA	all ingredients are listed as "ACTIVE"	

#### Legend

Australian Inventory of Industrial Chemicals
Chemical Inventory and Control Regulation
List of Existing and New Chemical Substances (CSCL-ENCS)
Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China
National Inventory of Chemical Substances
Korea Existing Chemicals Inventory
New Zealand Inventory of Chemicals
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH registered substances
Taiwan Chemical Substance Inventory
Toxic Substance Control Act

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value

# Safety data sheet Safety data sheet acc. to Regulation (EC) No. 1907/2006 (REACH)

### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



#### article number: **1YXY**

Abbr.	Descriptions of used abbreviations	
COD	Chemical oxygen demand	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)	
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms	
ELINCS	European List of Notified Chemical Substances	
EmS	Emergency Schedule	
Flam. Liq.	Flammable liquid	
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LEL	Lower explosion limit (LEL)	
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality	
log KOW	n-Octanol/water	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
ppm	Parts per million	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
Skin Corr.	Corrosive to skin	

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### PCBs Standard Solution 8 PCBs in isooctane, 10 µg/ml



#### article number: **1YXY**

Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text	
H225	Highly flammable liquid and vapour.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H336	May cause drowsiness or dizziness.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.