



REINOL S.R.L.

SFR00100300AA - BALL PEN INK BLUE 1779

Revision nr.5
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Page n. 1 / 13
Replaced revision:4 (Dated 14/10/2021)

EN

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: SFR00100300AA
Product name: BALL PEN INK BLUE 1779

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

Intended use: INK FOR BALLPOINT PENS

Identified Uses	Industrial	Professional	Consumer
Inks	✓	✓	✓
Uses Advised Against			
Do not use for purposes other than those specified			

1.3. Details of the supplier of the safety data sheet

Name: REINOL S.R.L.
Full address: Strada del Francese 21
District and Country: 10071 Borgaro T.se (TO) Italia
Tel.: +39 011 4701510
Fax: +39 011 4703910
e-mail address of the competent person responsible for the Safety Data Sheet: info@reinol.it

1.4. Emergency telephone number

For urgent inquiries refer to: REINOL S.R.L. - Tel. +39 011-4701510 (h 09.00 - 12.00) (h 14.00 - 16.00) working days

CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA - Piazza Sant'Onofrio, 4 CAP 00165 Roma Tel. 06-68593726
Az. Osp. Univ. Foggia - V.le Luigi Pinto, 1 CAP 71122 Foggia Tel. 800183459
Az. Osp. A. Cardarelli - Via A. Cardarelli, 9 CAP 80131 Napoli Tel. 081-5453333
CAV Policlinico Umberto I - V.le del Policlinico, 155 CAP 00161 Roma Tel. 06-49978000
CAV Policlinico A. Gemelli - Largo Agostino Gemelli, 8 CAP 00168 Roma Tel. 06-3054343
Az. Osp. Careggi - U.O. Tossicologia Medica - Largo Brambilla, 3 CAP 50134 Firenze Tel. 055-7947819
CAV Centro Nazionale di Informazione Tossicologica - Via Salvatore Maugeri, 10 CAP 27100 Pavia Tel. 0382-24444
Osp. Niguarda Ca' Granda - Piazza Ospedale Maggiore, 3 CAP 20162 Milano Tel. 02-66101029
Azienda Ospedaliera Papa Giovanni XXIII - Piazza OMS, 1 CAP 24127 Bergamo Tel. 800-883300
Azienda Ospedaliera Integrata Verona - Piazzale Aristide Stefani, 1 - CAP 37126 Tel. 800011858

Servizi operativi 24h/24h

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.

**SECTION 2. Hazards identification ... / >>**

Skin sensitization, category 1B

H317

May cause an allergic skin reaction.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Danger

Hazard statements:

H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.

Precautionary statements:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280 Wear protective gloves / eye protection / face protection.
P310 Immediately call a POISON CENTER / a doctor / a center suitable for emergency medical advice.
P261 Avoid breathing dust / fume / gas / mist / vapours / spray.

Contains: (Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE
2-PHENOXYETHANOL
SOLVENT BLUE 4 < 0,1% MICHLER'S KETONE

2.3. Other hazardsOn the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
2-PHENOXYETHANOL		
INDEX 603-098-00-9	22 \leq x < 25	Acute Tox. 4 H302, Eye Dam. 1 H318, STOT SE 3 H335 LD50 Oral: 1850 mg/kg
EC 204-589-7		
CAS 122-99-6		
REACH Reg. 01-2119488943-21-xxxx		
SOLVENT BLUE 4 < 0,1% MICHLER'S KETONE		
INDEX 5 \leq x < 7		Eye Dam. 1 H318, Skin Sens. 1B H317, Classification note according to Annex VI to the CLP Regulation: 1
EC 229-851-8		
CAS 6786-83-0		
REACH Reg. 01-2119950688-22-xxxx		
4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL		
INDEX 5 \leq x < 7		Acute Tox. 4 H302, STOT RE 2 H373, Eye Irrit. 2 H319, Aquatic Chronic 3 H412 LD50 Oral: >300 mg/kg
EC 209-218-2		
CAS 561-41-1		
REACH Reg. 01-2119979581-25-xxxx		

**SECTION 3. Composition/information on ingredients ... / >>****(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE**INDEX $5 \leq x < 7$ **Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1**

EC 203-749-3

CAS 110-25-8

STA Inhalation vapours: 11 mg/l**BENZYL ALCOHOL**INDEX $603-057-00-5$ $5 \leq x < 7$ **Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319**

EC 202-859-9

CAS 100-51-6

LD50 Oral: 1620 mg/kg, LC50 Inhalation mists/powders: >4,178 mg/l/4h

REACH Reg. 01-2119492630-38-xxxx

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures**4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products.

5.3. Advice for firefighters**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.



SECTION 6. Accidental release measures ... / >>

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
RUS	Россия	ПОСТАНОВЛЕНИЕ от 13 февраля 2018 г. N 25 ОБ УТВЕРЖДЕНИИ ГИГИЕНИЧЕСКИХ НОРМАТИВОВ ГН 2.2.5.3532-18 "ПРЕДЕЛЬНО ДОПУСТИМЫЕ КОНЦЕНТРАЦИИ (ПДК) ВРЕДНЫХ ВЕЩЕСТВ В ВОЗДУХЕ РАБОЧЕЙ ЗОНЫ"
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)

**SECTION 8. Exposure controls/personal protection ... / >>****2-PHENOXYETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	5,7	1	5,7	1	
MAK	DEU	5,7	1	5,7	1	
NDS/NDSCh	POL	230				
ПДК	RUS			2		
MV	SVN	110	20	110	20	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,943	mg/l
Normal value in marine water	0,0943	mg/l
Normal value for fresh water sediment	7,2366	mg/kg
Normal value for marine water sediment	0,7237	mg/kg
Normal value for water, intermittent release	3,44	mg/l
Normal value of STP microorganisms	24,8	mg/l
Normal value for the terrestrial compartment	1,26	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	17,43 mg/kg bw/d	VND	17,43 mg/kg bw/d				
Inhalation			2,41 mg/m3	2,41 mg/m3			8,07 mg/m3	8,07 mg/m3
Skin			VND	20,83 mg/kg bw/d			VND	34,72 mg/kg bw/d

SOLVENT BLUE 4 < 0,1% MICHLER'S KETONE**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	0,12 mg/kg bw/d				
Inhalation			NPI	0,208 mg/m3			NPI	0,844 mg/m3
Skin			NPI	0,239 mg/kg bw/d			NPI	0,479 mg/kg bw/d

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,0016	mg/l
Normal value in marine water	16	mg/l
Normal value for fresh water sediment	2,19	mg/kg
Normal value for marine water sediment	0,219	mg/kg
Normal value for the terrestrial compartment	0,438	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral								0,0417 mg/kg bw/d
Inhalation	NPI	NPI	NPI	0,0725 mg/m3	NPI	NPI	NPI	0,411 mg/m3
Skin	NPI	NPI	NPI	0,0417 mg/kg bw/d	NPI	NPI	NPI	0,117 mg/kg bw/d



SECTION 8. Exposure controls/personal protection ... / >>

BENZYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	5				
TLV	CZE	40	8,88	80	17,76	
AGW	DEU	22	5	44	10	INHAL
MAK	DEU	22	5	44	10	INHAL
NDS/NDSCh	POL	240				
MV	SVN	22	5	44	10	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	1	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	5,27	mg/kg
Normal value for marine water sediment	0,527	mg/kg
Normal value for water, intermittent release	2,3	mg/l
Normal value of STP microorganisms	39	mg/l
Normal value for the terrestrial compartment	0,456	mg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	20 mg/kg bw/d	VND	4 mg/kg bw/d				
Inhalation	NPI	27 mg/m3	NPI	5,4 mg/m3	NPI	110 mg/m3	NPI	22 mg/m3
Skin	NPI	20 mg/kg bw/d	NPI	4 mg/kg bw/d	NPI	40 mg/kg bw/d	NPI	8 mg/kg bw/d

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00043	mg/l
Normal value in marine water	0,000043	mg/l
Normal value for water, intermittent release	0,0043	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		92 mg/kg bw/d		5 mg/kg bw/d				
Inhalation	9 mg/m3	9 mg/m3	0,005 mg/m3	0,1 mg/m3	18 mg/m3	18 mg/m3	0,01 mg/m3	0,2 mg/m3
Skin		50 mg/kg bw/d		5 mg/kg bw/d		100 mg/kg bw/d		10 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard

; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.



SECTION 8. Exposure controls/personal protection ... / >>

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	viscous liquid	
Colour	blue	
Odour	imperceptible	
Melting point / freezing point	not determined	
Initial boiling point	not determined	
Flammability	not flammable	
Lower explosive limit	not determined	
Upper explosive limit	not determined	
Flash point	> 90 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	not applicable	
Kinematic viscosity	not determined	
Dynamic viscosity	8000 +/- 1000 mPa*s @ 25°C	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not determined	
Vapour pressure	not determined	
Density and/or relative density	1,050 +/- 0,100 kg/l	
Relative vapour density	not determined	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Evaporation rate	not determined
VOC (Directive 2010/75/EU)	25,20 %
VOC (volatile carbon)	13,65 %
Explosive properties	not explosive

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.



SECTION 10. Stability and reactivity ... / >>

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

2-PHENOXYETHANOL

LD50 (Dermal):	> 2214 mg/kg Rabbit (New Zealand White) - Standard acute method
LD50 (Oral):	1850 mg/kg Rat (Wistar) - OECD Guideline 401

SOLVENT BLUE 4 < 0,1% MICHLER'S KETONE

LD50 (Dermal):	> 2000 mg/kg Rat (Wistar) - OECD Guideline 402
LD50 (Oral):	2000 mg/kg Rat (Wistar) (female) - OECD Guideline 423

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL

LD50 (Dermal):	> 2000 mg/kg Rat (Wistar) - OECD Guideline 402
LD50 (Oral):	> 300 mg/kg Rat (Wistar) (female) - OECD Guideline 423

BENZYL ALCOHOL

LD50 (Dermal):	> 2000 mg/kg Rabbit - EPA OTS 798.1100 (Acute Dermal Toxicity)
LD50 (Oral):	1620 mg/kg Rat (Wistar) (male) - Standard acute method
LC50 (Inhalation mists/powders):	> 4,178 mg/l/4h Rat (Wistar) - OECD Guideline 403

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

LD50 (Oral):	> 5000 mg/kg Rat (Sprague-Dawley) - OECD Guideline 420
LC50 (Inhalation vapours):	1,8 mg/l/4h Rat - OECD Guideline 403
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP



SECTION 11. Toxicological information ... / >>

(figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

BENZYL ALCOHOL

LC50 - for Fish

460 mg/l/96h Pimephales promelas - EPA OPP 72-1 (Fish Acute Toxicity Test)

EC50 - for Crustacea

230 mg/l/48h Daphnia magna - OECD Guideline 202

EC50 - for Algae / Aquatic Plants

770 mg/l/72h Pseudokirchnerella subcapitata - OECD Guideline 201

Chronic NOEC for Fish

48,897 mg/l Fish species

Chronic NOEC for Crustacea

51 mg/l Daphnia magna - OECD Guideline 211 - Total exposure duration: 21 days

Chronic NOEC for Algae / Aquatic Plants

310 mg/l Pseudokirchnerella subcapitata - OECD Guideline 201 - Total exposure duration: 72h

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

LC50 - for Fish

1 mg/l/96h Leuciscus idus - EU Method C.1

EC50 - for Crustacea

0,43 mg/l/48h Daphnia magna - OECD Guideline 202

EC50 - for Algae / Aquatic Plants

6,3 mg/l/72h Desmodesmus subspicatus - EU Method C.3

2-PHENOXYETHANOL

LC50 - for Fish

344 mg/l/96h Pimephales promelas - ASTM guideline

EC50 - for Crustacea

> 500 mg/l/48h Daphnia magna - OECD Guideline 202

EC50 - for Algae / Aquatic Plants

> 500 mg/l/72h Desmodesmus subspicatus - DIN 38412 Part 9

**SECTION 12. Ecological information ... / >>**

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL
LC50 - for Fish 1,6 mg/l/96h Danio rerio - OECD Guideline 203
EC50 - for Crustacea 1,636 mg/l/48h Daphnia magna

12.2. Persistence and degradability

BENZYL ALCOHOL
Solubility in water > 10000 mg/l
Rapidly degradable % Degradation: 92-96% - Duration of test: 14 days - Method: OECD Guideline 301 C

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE
Solubility in water 0,44 mg/l
Rapidly degradable Method: OECD Guideline 301 B

2-PHENOXYETHANOL
Solubility in water 24000 mg/l
Rapidly degradable Degradation: > 90% in 15 days (OECD Guideline 301 A)

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL
Solubility in water 100-1000 mg/l
NOT rapidly degradable

SOLVENT BLUE 4 < 0,1% MICHLER'S KETONE
NOT rapidly degradable

12.3. Bioaccumulative potential

BENZYL ALCOHOL
Partition coefficient: n-octanol/water 1,05
BCF 1,37 L/kg ww

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE
Partition coefficient: n-octanol/water 6,83 Log Kow

2-PHENOXYETHANOL
Partition coefficient: n-octanol/water 1,2 Log Kow
BCF 0,349 -

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL
Partition coefficient: n-octanol/water 2,039
BCF 352,7 L/kg ww

12.4. Mobility in soil

BENZYL ALCOHOL
Partition coefficient: soil/water 1,332 l/kg

2-PHENOXYETHANOL
Partition coefficient: soil/water 1,6

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL
Partition coefficient: soil/water 4,1359

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available



SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

not applicable

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3

Contained substance

Point 75

Point 72

FORMALDEHYDE
REACH Reg.: 01-2119488953-20-xxxx

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL



SECTION 15. Regulatory information ... / >>

REACH Reg.: 01-2119979581-25-xxxx

Substances subject to authorisation (Annex XIV REACH)

4,4'-BIS(DIMETHYLAMINO)-4''-(METHYLAMINO)TRITYL ALCOHOL

REACH Reg.: 01-2119979581-25-xxxx

Sunset Date: 25/01/2025

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

BENZYL ALCOHOL

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration



SECTION 16. Other information ... / >>

- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.