

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2020/878)

Rhodamine B

Version 1 Date of compilation: 22/05/2024

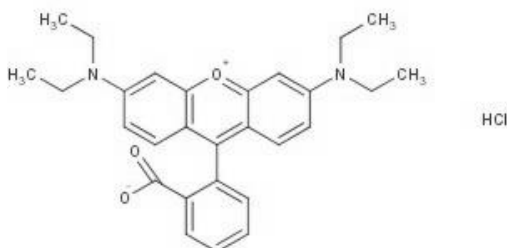


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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name:	Rhodamine B
Product Code:	ALQ0005
IUPAC Name:	9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride
Synonyms:	Basic Violet 10, Brilliant Pink B, Rhodamine O, Tetraethylrhodamine; C.I.45170.
CAS No:	81-88-9
EC No:	201-383-9
Formula:	C ₂₈ H ₃₁ ClN ₂ O ₃
Molar mass:	479,01 g/mol
Registration No:	A registration number is not available for this substance because the substance or its uses are exempted from registration, the annual tonnage does not require registration or such registration is foreseen for a later date.
Product type:	Monoconstituent substance, organic. Powder-solid.



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

Professional/industrial use. Fluorescent tracer.
Radiator coolants, generator coolants, detection of spills and leaks in pipelines.
Laboratory reagent

Uses advised against:

All uses not specified in this section or in section 7.3. Due to lack of experience or data, the supplier cannot approve other unspecified use.

1.3 Details of the supplier of the safety data sheet.

Company:	ALQUERA CIENCIA SL
Address:	C/ Vilar de Donas 9
City:	28050 - Madrid
Province:	Madrid (Spain)
Telephone:	0034 620 88 75 97
E-mail:	info@alquera.com
Web:	https://www.alquera.com

1.4 Emergency telephone number: 0034 620 88 75 97 (SDS) (Only available during office hours; Monday-Friday; 09:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EC) No 1272/2008:

- Acute Tox. 4 : Harmful if swallowed.
- Aquatic Chronic 3 : Harmful to aquatic life with long lasting effects.
- Eye Dam. 1 : Causes serious eye damage.

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2.2 Label elements.

Labelling in accordance with Regulation (EC) No 1272/2008:

Pictograms:



Signal Word:

Danger

Hazard statements:

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P264 Wash with soap and water thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents or container in accordance with applicable national/local legislation.

2.3 Other hazards.

This substance does not contain components considered to be persistent, bioaccumulative, toxic, (PBT) or very bioaccumulative and very persistent (vPvB) $\geq 0.1\%$.

This product does not contain substance(s) included in the list established pursuant to Article 59(1) due to their endocrine disrupting properties, nor have they been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 and Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1%.

Dust formation. Dust deposits may accumulate on any surface in a work area. The product in the delivered form is not capable of producing a dust explosion; but the accumulation of fine dust leads to a dust explosion hazard.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Monoconstituent. Organic.

IUPAC Name: 9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride
CAS No: 81-88-9
EC No: 201-383-9
Formula: $C_{28}H_{31}ClN_2O_3$
Molar mass: 479,01 g/mol

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
CAS No: 81-88-9 EC No: 201-383-9	9-(2-carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride	95 - 100 %	Acute Tox. 4, H302 - Aquatic Chronic 3, H412 - Eye Dam. 1, H318	-

3.2 Mixtures.

Not applicable.

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SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Wash eyes with plenty of clean and cool water for at least 15-20 minutes while pulling eyelids up and seek medical assistance. Do not let the person to rub the affected eye.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

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

Corrosive Product, contact with eyes can cause burns, irreversible damage, risk of blindness.

Ingestion or inhalation may cause internal damage if this occurs immediate medical assistance is required.

Harmful Product if swallowed. Headaches, irregular heartbeat, decreased blood pressure, choking, spasms, cyanosis.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract. Treat symptomatically. Contact a poison treatment specialist immediately if a large amount has been ingested or inhaled.

SECTION 5: FIREFIGHTING MEASURES.

Non-flammable but combustible product. The product is NOT classified as flammable, in case of fire the following measures should be taken:

5.1 Extinguishing media.

Suitable extinguishing media:

Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.

Special risks.

Exposure to combustion or decomposition products can be harmful to your health.

In case of fire may form nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), hydrogen chloride gas.

5.3 Advice for firefighters.

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Product residues and extinguishing media may contaminate the aquatic environment.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

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SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

For exposure control and individual protection measures, see section 8.

Avoid contact with eyes and skin.

Avoid dust formation. Do not breathe dust.

6.2 Environmental precautions.

Product dangerous for the environment, in case of large spills or if the product contaminates lakes, rivers, or sewers, inform the responsible authorities according to local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.

Cover sewers. Collect and vacuum spills. Observe possible material restrictions (see indications in sections 7 or 10). Collect mechanically, dry and dispose of residues. Rinse. Avoid dust formation.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Keep the product in containers made of a material identical to the original.

Avoid contact with eyes and skin.

Avoid dust formation. Do not breathe dust.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 ° C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidizing agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorized persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).

See section 1.2. Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

The information contained in this section contains general advice and indications. The information provided is based on the usual anticipated uses for the product. Additional measures may be necessary for bulk handling or other uses that could significantly increase worker exposure or environmental release.

8.1 Control parameters.

If this product contains ingredients with exposure limits, personal, workplace or biological monitoring may be necessary to determine the effectiveness of ventilation or other control measures and/or the need for respiratory protective equipment. Monitoring standards such as the following should be used for reference: European Standard EN 689 (Atmospheres in workplaces. Guidelines for the assessment of inhalation exposure of chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Atmospheres in workplaces. Guidelines for the application and use of procedures for assessing exposure to chemical and biological agents) European Standard EN 482 (Atmospheres in workplaces. General requirements concerning the performance of procedures for the measurement of chemical agents) National guidance documents concerning methods for the determination of hazardous substances should also be used as a reference.

The product does NOT contain substances with Professional Exposure Environmental Limit Values.

The product does NOT contain substances with Biological Limit Values.

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Nuisance dust: Inhalable dust 10 mg/m³ // Respirable dust 4 mg/m³

The environmental limit value for general dust (INSST, Spain) is:

- VLA-ED particles not otherwise specified. Inhalable fraction 10 mg/m³
- VLA-ED Particulates not otherwise specified. Respirable fraction 3 mg/m³

This is a dusty product. The workplace exposure limit for dust (USA-OSHA) is:

- 8-hour TWA inhalable dust: 10 mg/m³
- 8-hour TWA respirable dust: 5 mg/m³

It is recommended that the occupational exposure limit values established for inert dusts not otherwise classified be considered in the risk assessment process. If these limits are exceeded, it is recommended to use a P-type filter whose class (1, 2 or 3) should be chosen depending on the outcome of the risk assessment.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Individual protection measures, such as personal protective equipment As a preventative measure it is recommended to use basic Personal Protective Equipment, in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsections 7.1 and 7.2. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

Respiratory protection

The use of protective equipment will be necessary in case of mist/dust formation or in case of exceeding occupational exposure limits if they exist (see section 8.1). Use respiratory protection in case of spray application. Wear respiratory protection in case of prolonged exposure. In case of insufficient ventilation, wear respiratory protection equipment.

Specific protection for the hands

Replace the gloves at any sign of deterioration. Breakthrough time >480 min (permanent contact protection). When only brief contact is expected, it is recommended to use gloves with level 2 or higher protection, with breakthrough time >30 min. The breakthrough time of the selected gloves should be in accordance with the intended period of use. Various factors (e.g. temperature) mean that in practice the breakthrough time of chemical-resistant protective gloves is significantly shorter than that specified in EN374. An increase in temperature due to hot substances, body heat, etc. and a weakening of the effective thickness due to expansion can lead to a significant shortening of the breakthrough time.

For the selection of a specific type of gloves for specific applications, with a certain duration, relevant factors in the workplace should be taken into account (but not limited to), such as: other chemicals to be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential allergies to the glove material itself, etc... Due to the wide variety of circumstances and possibilities, the instruction manual of the glove manufacturers should be taken into account. Gloves should be replaced immediately if signs of degradation are observed.

Clothing:

Clothing, including boots, gloves, lab coat, apron or coveralls, should be worn whenever there is a possibility of skin contact. Wash hands before work breaks and after work is finished. Change contaminated clothing.

Additional emergency measures

Emergency shower: ANSI Z358-1, ISO 3864-1:2011, ISO 3864-4:2011

Eyewash stations: DIN 12 899, ISO 3864-1:2011, ISO 3864-4:2011

General measures:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Good personal hygiene practices are necessary at all times when working with chemicals. These practices include, but are not limited to, cleaning equipment when it is removed at the end of each shift or when taking breaks and especially if contamination occurs.

Controlling environmental exposure

Do not allow product to enter the sewage system.

Advice on personal protection is valid for high levels of exposure.

Choose personal protection adapted to the risks of exposure

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Concentration:	100 %				
Uses:	Professional/industrial use. Fluorescent tracer. Radiator coolants, generator coolants, detection of spills and leaks in pipelines. Laboratory reagent				
Breathing protection:					
PPE:	Particle filter mask				
Characteristics:	«CE» marking, category III. Made of filtering material, it covers nose, mouth and chin.				
CEN standards:	EN 149, EN 143				
Maintenance:	Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use.				
Observations:	Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment.				
Filter Type needed:	P1/P2				
Hand protection:					
PPE:	Protective gloves against chemicals.				
Characteristics:	«CE» marking, category III.				
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420				
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.				
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.				
Material:	Nitrile/PVC/neoprene	Breakthrough time (min.):	> 480	Material thickness (mm):	0,11
Eye protection:					
PPE:	Protective goggles against particle impacts.				
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.				
CEN standards:	EN 165, EN 166, EN 167, EN 168				
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.				
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.				
Skin protection:					
PPE:	Anti-static protective clothing.				
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.				
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5				
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.				
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.				
PPE:	Anti-static safety footwear.				
Characteristics:	«CE» marking, category II.				
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346				
Maintenance:	The footwear should be checked regularly				
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Appearance:

Physical state (20°C): Solid – Dust (crystalline).

Colour: red-violet.

Odour: odourless.

Odour threshold: Not relevant due to the nature of the product, not providing information property of its hazards.

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Volatility:

Boiling point or initial boiling point and boiling range: N.A.
Vapour pressure: N.A. Solid.
Relative vapour density (air=1): N.A. Solid.
Evaporation rate : N.A. Solid.

Flammability:

Flammability: Non-flammable but combustible product.
Lower explosion limit: N.A.
Upper explosion limit: N.A.
Flash point: N.A.
Auto-ignition temperature: N.A.

Product description:

Melting/ Freezing point: 172-211 °C (similar products).
Decomposition temperature: 210-211 °C (similar products).
pH: 3 - 4 (in aqueous solution: 10 g/l, 20 °C) (similar products).
Dynamic viscosity (20°C): Not applicable, solid substance.
Kinematic viscosity (40°C): Not applicable, solid substance.
Solubility: Sparingly soluble in water.
Hydrosolubility: Sparingly soluble in water (10 g/l, GESTIS).
Liposolubility: N.A.
Partition coefficient n-octanol/water (log value): 1,9-2,0 (ECHA).
Absolute density: N.A.
Relative density: 0.79-1.4 (similar products).

Particle characteristics:

Granulometry: not available.

N.A.= Not Available/Non- Applicable due to the nature of the product, not providing information property of its hazards

9.2 Other information

Explosiveness: In accordance with column 2 of Annex VII of the REACH regulation, the study does not need to be conducted since there are no chemical groups associated with explosive properties present in the molecule. Thus, the chemical is likely to be "Non explosive". Non-explosive product, however, accumulation of fine dust leads to a dust explosion hazard.

Oxidising properties: In accordance with column 2 of Annex VII of the REACH regulation, the substance is incapable of reacting exothermically with combustible materials based on the chemical structure. It is an organic substance containing oxygen, but no halogen atoms and these elements are not chemically bonded to nitrogen or oxygen. Thus, the chemical is likely to be "non-oxidising".

Drop point: N.A.
Scintillation: N.A.
Solids %: 95-100%.

N.A.= Not Available/Non- Applicable due to the nature of the product, not providing information property of its hazards

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

The product does not present hazards by their reactivity under the recommended handling and storage conditions (see section 7). Dust deposits can accumulate on any surface in a work area. The product in the delivered form is not capable of producing a dust explosion; but the accumulation of fine dust leads to a dust explosion hazard.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

The product does not present possibility of hazardous reactions under the recommended handling and storage conditions (see section 7).
Possible violent reactions with strong oxidizing agents.

10.4 Conditions to avoid.

Avoid any improper handling, humidity, UV radiation/direct sunlight, strong heating.
Avoid: contact with eyes and skin, dust generation, breathing dust.
Keep away from heat. Decomposition starts at temperatures from: 210 - 211 °C.

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10.5 Incompatible materials.

Keep away from oxidising agents and from highly alkaline or acidic materials to prevent exothermic reactions.
Bleach. Strong reducing agents.

10.6 Hazardous decomposition products.

No decomposition if used for the intended uses.
In case of fire may form nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), hydrogen chloride gas.

SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on hazard classes as defined in Regulation (EC) N° 1272/2008.

There are no tested data available on the product.
Splatters in the eyes can cause irritation and reversible damage.

a) acute toxicity;

Product classified:

Acute toxicity (Oral), Category 4: Harmful if swallowed.

LD50 (oral, rat): 887 mg/kg (similar products).

Acute Toxicity Estimate (ATE):

Substances:

ATE (Oral) = 500 mg/kg

b) skin corrosion/irritation;

Not conclusive data for classification.

c) serious eye damage/irritation;

Product classified:

Serious eye damage, Category 1: Causes serious eye damage.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not classified.

Test Type: Ames Test, OECD 471

S.typhimurium

Metabolic activation: with or without metabolic activation

Result: negative (ECHA)

Test Type: gene mutation assay, OECD 476

Chinese hamster lung cells

Metabolic activation: with or without metabolic activation

Result: negative (ECHA)

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Not conclusive data for classification.

i) STOT-repeated exposure; Not conclusive data for classification.

j) aspiration hazard; Not applicable, solid.

11.2 Information on other hazards.

Endocrine disrupting properties

This product does not contain components with endocrine-disrupting properties with effects on human health $\geq 0,1\%$.

Other information

Symptoms and signs of poisoning: burning, coughing, wheezing, laryngitis, respiratory failure, headache, nausea, vomiting.

There is no information available on other adverse health effects.

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SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Do not flush waste down the drain.

Toxicity to fish

LC50 - *Cyprinus carpio* (Carp) - 83.9 mg/l - 48 h (ECOTOX database)

LC50 - *Lepomis macrochirus* - 379 mg/l - 96 h (ECOTOX database)

Toxicity to daphnia and other aquatic invertebrates

EC50 - *Daphnia magna* (Large sea flea) - 22.9 mg/l - 48 h

Toxicity to bacteria

EC10 - *Pseudomonas putida* - 120 mg/l - 30 min (External Safety Data Sheet)

12.2 Persistence and degradability.

Not readily biodegradable. Biodegradability-% degradation (O₂ consumption, 100 mg/l): 0% (ECHA).

Soluble in water, Persistence is unlikely.

Contains substances harmful to the environment or not degradable in wastewater treatment plants.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation.

Log Kow: 1.9-2.0. No bioaccumulation expected.

Bioaccumulation *Cyprinus carpio* (Carp) - 24 d

- 0.1 mg/l (Rhodamine B)

Bioconcentration factor (BCF): < 0.2

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product is soluble in water and can spread in aqueous systems. It will probably be mobile in the environment due to its solubility in water. The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

This substance does not contain components considered to be persistent, bioaccumulative, toxic, (PBT) or very bioaccumulative and very persistent (vPvB) $\geq 0.1\%$.

12.6 Endocrine disrupting properties.

This product does not contain components with environmental endocrine disrupting properties $\geq 0,1\%$.

12.7 Other adverse effects.

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See section 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated Community legislation:

Follow the provisions of Directive 2008/98/EC, Decision 2014/955/UE, Directive (UE) 2018/851, Directive (UE) 2019/904 regarding waste management. EU-legislation: Regulation (EU) No. 1357/2014 and modifications.

It is not possible to assign a specific code, as it depends on the user's intended use.

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SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product's spillage, proceed in accordance with point 6.

14.1 UN number or ID number.

Transportation is not dangerous.

14.2 UN proper shipping name.

Description:

ADR/RID: Not classified as hazardous for transport.

IMDG: Not classified as hazardous for transport.

ICAO/IATA: Not classified as hazardous for transport.

14.3 Transport hazard class(es).

Transportation is not dangerous.

14.4 Packing group.

Transportation is not dangerous.

14.5 Environmental hazards.

Transportation is not dangerous.

Transport by ship, FEm – Emergency sheets (F – Fire, S - Spills): Not applicable.

14.6 Special precautions for user.

Transportation is not dangerous.

14.7 Maritime transport in bulk according to IMO instruments.

Bulk transport is not foreseen.

SECTION 15: REGULATORY INFORMATION.

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

Volatile organic compound (VOC)

VOC content (p/p): 0 %

VOC content: 0 g/l

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

Candidate substances for authorization under Regulation (EC) 1907/2006 (REACH): Not applicable

Substances included in Annex XIV of REACH (authorization list): Not applicable.

Restrictions on the manufacture, placing on the market and use of certain substances, mixtures and articles included in Annex XVII of REACH: Not applicable to the intended uses of the product. Entries 3*, 75 (Substances in tattoo inks and permanent make up).

*Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles:

Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
3. Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;	1. Shall not be used in: - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, - tricks and jokes, - games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: - can be used as fuel in decorative oil lamps for supply to the general public, and, - present an aspiration hazard and are labelled with H304,

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<p>(c) hazard class 4.1; (d) hazard class 5.1.</p>	<p>4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).</p> <p>5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:</p> <p>(a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';</p> <p>(b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';</p> <p>(c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.</p>
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Kind of pollutant to water (Germany): WGK 2: Hazardous to water. (Autoclassified according to the AwSV Regulations)

Special provisions for the protection of humans or the environment:

It is recommended to use the information compiled in this safety data sheet as input data in a risk assessment of the local circumstances in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Classification codes:

Acute Tox. 4 : Acute toxicity (Oral), Category 4

Aquatic Chronic 3 : Chronic effect to the aquatic environment, Category 3

Eye Dam. 1 : Serious eye damage, Category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method/test
Environmental hazards	Calculation method/test

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute toxicity estimation.

AwSV: Facility Regulations for handling substances that are hazardous for the water.

BCF: Bioconcentration factor.

CAS: Chemical Abstract Service number.

CEN: European Committee for Standardization.

CLP: Regulation (EC) No. 1272/2008 on classification, labeling and packaging.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

EC50: Half maximal effective concentration.

EN: European Standard.

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PPE: Personal protection equipment.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
NOAEL: No-Observed Adverse Effect Level.
NOEC: No observed effect concentration.
OECD: Organization for Economic Cooperation and Development.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
VLA/OEL: Occupational exposure limit.
VLB: Biological limit value.
SDS: Safety Data Sheet.
WGK: Water hazard classes.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>
<http://echa.europa.eu/>
Regulation (EU) 2020/878.
Regulation (EC) No 1907/2006.
Regulation (EC) No 1272/2008.
Supplier Safety Data Sheet.SDS.
GESTIS SUBSTANCE DATABASE

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.