

Revision date: 29-Jan-2026

Issuing Date: 19-Feb-2020

Revision Number: 5

Product Name: LC402BK, LC402XLBK, LC406BK, LC406LBK, LC406XLBK, LC412BK, LC412XLBK, LC416BK, LC416XLBK, LC417XLBK, LC418XLBK, LC422BK, LC422XLBK, LC426BK, LC426XLBK, LC427BK, LC427XLBK, LC428XLBK, LC432BK, LC432XLBK, LC436BK, LC436XLBK, LC456BK, LC456XLBK, LC462BK, LC462XLBK, LC472BK, LC472XLBK, LC492XLBK ink

Safety data sheet number: BHK249

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

1.1. Product identifier

Safety data sheet number BHK249

Product Name LC402BK, LC402XLBK, LC406BK, LC406LBK, LC406XLBK, LC412BK, LC412XLBK, LC416BK, LC416XLBK, LC417XLBK, LC418XLBK, LC422BK, LC422XLBK, LC426BK, LC426XLBK, LC427BK, LC427XLBK, LC428XLBK, LC432BK, LC432XLBK, LC436BK, LC436XLBK, LC456BK, LC456XLBK, LC462BK, LC462XLBK, LC472BK, LC472XLBK, LC492XLBK ink

Other means of identification

Pure substance/mixture Mixture

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

Recommended use These products are black ink in a cartridge for Brother Industries, Ltd. inkjet multifunction devices and fax receivers. The cartridge should be used as supplied by Brother and for use in the products stated. Information provided on this SDS is only consistent with the use specified by Brother.

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Supplier

(Europe)
Brother International (Nederland) B.V.
Zanderij 25, 1185 ZM Amstelveen, The Netherlands

Brother International Europe Ltd.
1 Tame Street, Audenshaw, Manchester M34 5JE, UK
Telephone (for information): +44-161-330-6531
For further information, please contact

E-mail address sds.info@brother.co.jp

1.4. Emergency telephone number

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LC412BK, LC412XLBK, LC416BK, LC416XLBK, LC417XLBK, LC418XLBK, LC422BK,
LC422XLBK, LC426BK, LC426XLBK, LC427BK, LC427XLBK, LC428XLBK, LC432BK,
LC432XLBK, LC436BK, LC436XLBK, LC456BK, LC456XLBK, LC462BK, LC462XLBK,
LC472BK, LC472XLBK, LC492XLBK ink

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Emergency Telephone

CHEMTREC +1-703-527-3887 (International)

For France only:

Antipoison Center telephone number: ORFILA +33-1-45-425-959

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

EUH208 - Contains 1,2-benzisothiazol-3(2H)-one May produce an allergic reaction.

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

34 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

34 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

4.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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| Chemical name | CAS No. | EC No (EU Index No) | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) | REACH registration number |
|-------------------------------------|-----------|--------------------------|----------|---|--|----------|----------------------|---------------------------|
| Water | 7732-18-5 | 231-791-2 | 60-70 | No data available | - | - | - | Not applicable |
| Glycerol | 56-81-5 | 200-289-5 | 15-25 | No data available | - | - | - | Not applicable |
| Carbon Black | 1333-86-4 | 215-609-9 | 5-9 | No data available | - | - | - | Registered |
| Triethylene glycol, monobutyl ether | 143-22-6 | 205-592-6 (603-183-00-0) | 1-5 | Eye Dam. 1 (H318) | Eye Dam. 1 :: C>=30% Eye Irrit. 2 :: 20%<=C<30% | - | - | 01-21194751 07-38-XXXX |
| 2,2'-(ethylenedioxy) diethanol | 112-27-6 | 203-953-2 | 1-5 | No data available | - | - | - | Not applicable |
| 1,2,3-benzotriazole | 95-14-7 | 202-394-1 (613-350-00-X) | <0.3 | Aquatic Chronic 2 (H411) | - | - | - | Not applicable |
| 1,2-benzisothiazol-3(2H)-one | 2634-33-5 | 220-120-9 (613-088-00-6) | <0.05 | Acute Tox. 2 (H330) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | Skin Sens. 1A :: C>=0.036% | 1 | 1 | Not applicable |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD₅₀/LC₅₀ data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapor - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---------------|-----------------|-------------------|---|---|--------------------------------------|
| | | | | | |

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| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapor - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|--|-----------------|-------------------|---|---|--------------------------------------|
| Water 7732-18-5 | 89838.9 | No data available | No data available | No data available | No data available |
| Glycerol 56-81-5 | 27200 | 10000 | 5.85 | No data available | No data available |
| Carbon Black 1333-86-4 | 10000 | 2000 | 0.0046 | No data available | No data available |
| Triethylene glycol, monobutyl ether 143-22-6 | 5300 | 3540 | No data available | No data available | No data available |
| 2,2'-(ethylenedioxy)diethan ol 112-27-6 | 17000 | 22600 | 5.2 | No data available | No data available |
| 1,2,3-benzotriazole 95-14-7 | 560 | 10000 | 1.4325 | No data available | No data available |
| 1,2-benzisothiazol-3(2H)-o ne 2634-33-5 | 450 | 2000 | 0.21 | No data available | No data available |

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|-----------------------|--|
| General advice | If symptoms persist, call a physician. |
| Inhalation | Remove to fresh air. Get immediate medical advice/attention. |
| Eye contact | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. If eye irritation persists: Get medical advice/attention. |
| Skin contact: | Wash with soap and water. If skin irritation persists, call a physician. |
| Ingestion | Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of water to drink. |

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

| | |
|-----------------|--|
| Symptoms | Inhalation (Vapor / Mist) : No specific effects and/or symptoms have been reported or known For large quantities: May cause irritation to the respiratory system. Increased difficulty in |
|-----------------|--|

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breathing. Sneezing. Coughing

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

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical, CO₂, water spray or regular foam

Unsuitable extinguishing media None.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Thermal decomposition can lead to release of irritating and toxic gases and vapors
Carbon monoxide Carbon dioxide (CO₂) Nitrogen oxides (NO_x) Oxides of sulfur

5.3. Advice for firefighters

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid contact with eyes, skin and clothing

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system

6.3. Methods and material for containment and cleaning up

Methods for containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Wipe up with absorbent towel Wash with water to remove remaining traces of ink.

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Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with eyes, skin and clothing.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Keep cool. Protect from sunlight.

7.3. Specific end use(s)

Specific use(s) Water based ink for inkjet printing machine.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---|----------------|--|---------------------------|-----------------------------|---|
| Glycerol 56-81-5 | - | - | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ |
| Carbon Black 1333-86-4 | - | - | TWA: 3 mg/m ³ | - | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ |
| 2,2'-(ethylenedioxy)diethanol 112-27-6 | - | - | - | TWA: 15.0 mg/m ³ | - |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Glycerol 56-81-5 | - | TWA: 10 mg/m ³ Ceiling: 15 mg/m ³ | - | TWA: 10 mg/m ³ | TWA: 20 mg/m ³ |

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| | | | | | |
|---|--|---|--|---|---|
| Carbon Black 1333-86-4 | - | TWA: 2.0 mg/m ³ | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ | TWA: 3 mg/m ³ | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Glycerol 56-81-5 | TWA: 10 mg/m ³ | TWA: 200 mg/m ³ | TWA: 200 mg/m ³ Peak: 400 mg/m ³ | TWA: 10 mg/m ³ | - |
| Carbon Black 1333-86-4 | TWA: 3.5 mg/m ³ | - | - | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ | TWA: 3 mg/m ³ |
| 2,2'-(ethylenedioxy)diethanol 112-27-6 | - | TWA: 1000 mg/m ³ | TWA: 1000 mg/m ³ Peak: 2000 mg/m ³ | - | - |
| 1,2,3-benzotriazole 95-14-7 | - | - | * | - | - |
| 1,2-benzisothiazol-3(2H)-one 2634-33-5 | - | - | skin sensitizer | - | - |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Carbon Black 1333-86-4 | TWA: 3 mg/m ³ STEL: 15 mg/m ³ | - | TWA: 3 mg/m ³ | - | - |
| 1,2,3-benzotriazole 95-14-7 | - | - | - | TWA: 5 mg/m ³ | - |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Glycerol 56-81-5 | - | - | - | - | TWA: 10 mg/m ³ |
| Carbon Black 1333-86-4 | - | - | - | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ | TWA: 4 mg/m ³ |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| Glycerol 56-81-5 | TWA: 10 mg/m ³ | - | TWA: 10 mg/m ³ | TWA: 200 mg/m ³ STEL: 400 mg/m ³ | TWA: 10 mg/m ³ |
| Carbon Black 1333-86-4 | TWA: 3 mg/m ³ | - | TWA: 2 mg/m ³ TWA: 10 mg/m ³ Ceiling: 10 mg/m ³ | - | TWA: 3.5 mg/m ³ |
| 2,2'-(ethylenedioxy)diethanol 112-27-6 | - | TWA: 114 ppm TWA: 700 mg/m ³ STEL: 163 ppm STEL: 1000 mg/m ³ | - | TWA: 1000 mg/m ³ STEL: 2000 mg/m ³ | - |
| Chemical name | Sweden | | Switzerland | | United Kingdom |
| Glycerol 56-81-5 | - | | TWA: 50 mg/m ³ STEL: 100 mg/m ³ | | TWA: 10 mg/m ³ STEL: 30 mg/m ³ |
| Carbon Black 1333-86-4 | NGV: 3 mg/m ³ | | - | | TWA: 3.5 mg/m ³ STEL: 7 mg/m ³ |
| 2,2'-(ethylenedioxy)diethanol 112-27-6 | - | | TWA: 1000 mg/m ³ STEL: 2000 mg/m ³ | | - |

Biological occupational exposure limits

| Chemical name | European Union | Austria | Bulgaria | Croatia | Czech Republic |
|---------------|----------------|---------|----------|---------|----------------|
| Carbon Black | - | (-) | - | - | - |

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| | | | | | |
|-----------|--|--|--|--|--|
| 1333-86-4 | | | | | |
|-----------|--|--|--|--|--|

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be sufficient under normal use.

Personal protective equipment Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied:

Eye/face protection Safety goggles

Hand protection Protective gloves

Skin and body protection Apron. Rubber boots.

Respiratory protection In case of large spillages: Wear suitable respiratory protective equipment.

Thermal hazards No information available.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Color black
Odor Slight
Odor threshold No information available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|---------------|-------------------------|
| Melting point / freezing point | < -5 °C | |
| Initial boiling point and boiling range | > 100 °C | |

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| | | |
|---|--------------------------|------------------------------------|
| Flammability | No data available | |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Flash point | > 93.3 °C | Tag Closed Cup, Cleveland Open Cup |
| Autoignition temperature | > 400 °C | |
| Decomposition temperature | No data available | |
| pH | 7 - 9 | |
| pH (as aqueous solution) | No data available | None known |
| Kinematic viscosity | No data available | |
| Dynamic viscosity | 2 - 5 mPa·s | |
| Water solubility | Soluble in water | |
| Solubility(ies) | No information available | |
| Partition coefficient | No data available | |
| Vapor pressure | No data available | |
| Relative density | 1.0 - 1.1 | (H ₂ O=1) |
| Bulk density | No data available | |
| Liquid Density | No data available | |
| Relative vapor density | No data available | |
| Particle characteristics | | |
| Particle Size | No data available | |
| Particle Size Distribution | No data available | |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

| | |
|-----------------------------|--------------------------|
| Explosives | |
| Explosive properties | No information available |
| Oxidizing properties | No information available |

9.2.2. Other safety characteristics

| | |
|---|--------------------------|
| No information available | |
| Sensitivity to mechanical impact | No information available |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|-------------------|-------|
| Reactivity | None. |
|-------------------|-------|

10.2. Chemical stability

| | |
|------------------|---------------------------------|
| Stability | Stable under normal conditions. |
|------------------|---------------------------------|

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Explosion data

Sensitivity to mechanical impact No information available

Sensitivity to static discharge No information available

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat. Keep away from water or moist air.

10.5. Incompatible materials

Incompatible materials Acids, Bases, Oxidizing agent, Reducing agent

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Oxides of sulfur

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation No information available

Eye contact No information available.

Skin contact No information available.

Ingestion Acute LD₅₀ > 2000 mg/kg (OECD 423 method)

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|-----------|-------------|-----------------|
|---------------|-----------|-------------|-----------------|

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| | | | |
|-------------------------------------|-----------------------|--------------------------|--------------------------------------|
| Water | > 90 mL/kg (Rat) | - | - |
| Glycerol | = 27200 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 5.85 mg/L (Rat) 4 h |
| Carbon Black | > 10000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 4.6 mg/m ³ (Rat) 4 h |
| Triethylene glycol, monobutyl ether | = 5300 mg/kg (Rat) | = 3540 mg/kg (Rabbit) | - |
| 2,2'-(ethylenedioxy)diethanol | = 17 g/kg (Rat) | > 20 mL/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |
| 1,2,3-benzotriazole | = 560 mg/kg (Rat) | > 10000 mg/kg (Rabbit) | = 1910 mg/m ³ (Rat) 3 h |
| 1,2-benzisothiazol-3(2H)-one | = 450 mg/kg (Rat) | > 2000 mg/kg (Rat) | 0.21 mg/L |

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

Skin corrosion/irritation Non-irritant (OECD 404 method)

Serious eye damage/eye irritation Non-irritant (OECD 405 method)

Respiratory or skin sensitization Respiratory sensitization : No information available
It is not a skin sensitizer (OECD 442B method)

Germ cell mutagenicity AMES test : Negative (OECD 471 method)

Carcinogenicity Carbon Black: In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals, for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors

Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA

Reproductive toxicity No information available

STOT - single exposure No information available

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STOT - repeated exposure No information available

Aspiration hazard No information available

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-------------------------------------|---|--|----------------------------|---|
| Glycerol | - | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i>) | - | - |
| Triethylene glycol, monobutyl ether | EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i>) | LC50: =2400mg/L (96h, <i>Pimephales promelas</i>) | - | EC50: >500mg/L (48h, <i>Daphnia magna</i>) |
| 2,2'-(ethylenedioxy)diethanol | - | LC50: 56200 - 63700mg/L (96h, <i>Pimephales promelas</i>) LC50: =10000mg/L (96h, <i>Lepomis macrochirus</i>) LC50: =61000mg/L (96h, <i>Lepomis macrochirus</i>) | - | EC50: =42426mg/L (48h, <i>Daphnia magna</i>) |
| 1,2,3-benzotriazole | EC50: =15.4mg/L (96h, freshwater algae) | LC50: =39mg/L (96h, <i>Oncorhynchus mykiss</i>) | - | EC50: =141.6mg/L (48h, water flea) |

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

| Chemical name | Partition coefficient |
|-------------------------------------|-----------------------|
| Glycerol | -1.76 |
| Triethylene glycol, monobutyl ether | 0.51 |
| 2,2'-(ethylenedioxy)diethanol | -1.98 |
| 1,2-benzisothiazol-3(2H)-one | 0.99 |

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12.4. Mobility in soil

Mobility in soil No information available.
Mobility No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

| Chemical name | PBT and vPvB assessment |
|-------------------------------------|----------------------------------|
| Glycerol | The substance is not PBT / vPvB. |
| Carbon Black | The substance is not PBT / vPvB. |
| Triethylene glycol, monobutyl ether | The substance is not PBT / vPvB. |
| 2,2'-(ethylenedioxy)diethanol | The substance is not PBT / vPvB. |
| 1,2,3-benzotriazole | The substance is not PBT / vPvB. |
| 1,2-benzisothiazol-3(2H)-one | The substance is not PBT / vPvB. |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with federal, state and local regulations.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
14.2 UN proper shipping name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special precautions for user
Special Provisions None

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IMDG

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None
- 14.7 Maritime transport in bulk according to IMO instruments Not applicable

RID

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None

ADR

- 14.1 UN number or ID number Not regulated
- 14.2 UN proper shipping name Not regulated
- 14.3 Transport hazard class(es) Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazards Not applicable
- 14.6 Special precautions for user
Special Provisions None

SECTION 15: Regulatory information

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

National Regulations

France

Occupational Illnesses (R-463-3, France)

| Chemical name | French RG number |
|--|------------------|
| Carbon Black - 1333-86-4 | RG 16, RG 16bis |
| Triethylene glycol, monobutyl ether - 143-22-6 | RG 84 |
| 2,2'-(ethylenedioxy)diethanol - 112-27-6 | RG 84 |
| 1,2-benzisothiazol-3(2H)-one - 2634-33-5 | RG 65, RG 66 |

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European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorization per REACH Annex XIV |
|--|---|--|
| Carbon Black - 1333-86-4 | Use restricted. See entry 75. | - |
| Triethylene glycol, monobutyl ether - 143-22-6 | Use restricted. See entry 75. | - |
| 1,2-benzisothiazol-3(2H)-one - 2634-33-5 | Use restricted. See entry 75. | - |

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Plant Protection Products (1107/2009/EC)

| Chemical name | EU - Plant Protection Products (1107/2009/EC) |
|--------------------------|---|
| Carbon Black - 1333-86-4 | Plant protection agent |

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) |
|--|---|
| 1,2-benzisothiazol-3(2H)-one - 2634-33-5 | Product-type 2: Disinfectants and algicides not intended for direct application to humans or animals Product-type 6: Preservatives for products during storage Product-type 9: Fiber, leather, rubber and polymerized materials preservatives Product-type 11: Preservatives for liquid-cooling and processing systems Product-type 12: Slimeicides Product-type 13: Working or cutting fluid preservatives |

International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |
| NZIoC | Complies |

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Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances
- NZIoC** - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No chemical safety assessment has been carried out

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H330 - Fatal if inhaled
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects

Legend

- SVHC: Substances of Very High Concern for Authorization:
- PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
- vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

Legend SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
- Ceiling Ceiling Limit Value * Skin designation
- + Sensitizers ** ** Trade secret

| Classification procedure | |
|---|--|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | On basis of test data |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapor | Calculation method |
| Acute inhalation toxicity - dust/mist | Expert judgment and weight of evidence determination |

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| | |
|-----------------------------------|-----------------------|
| Skin corrosion/irritation | On basis of test data |
| Serious eye damage/eye irritation | On basis of test data |
| Respiratory sensitization | Calculation method |
| Skin sensitization | On basis of test data |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

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materials or in any process, unless specified in the text.

End of Safety Data Sheet