

Product Name: LC404BK, LC414BK, LC424BK

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHK253-01

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

### 1.1. Product identifier

Product Name LC404BK, LC414BK, LC424BK  
Product Form Mixture  
Safety data sheet number BHK253-01

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

Relevant identified uses 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

Importer (Europe)  
Brother International Europe Ltd.  
1 Tame Street, Audenshaw, Manchester M34 5JE, UK  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands  
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

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

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

## Section 2: Hazard(s) 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 *Regulation (EC) No 1272/2008*

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

Product Name: LC404BK, LC414BK, LC424BK

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHK253-01

EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction.

**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).

**Section 3: Composition/information on ingredients**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name              | CAS No    | EC No     | EC Index No  | Weight-% | Specific concentration limit (SCL) | Classification according to Regulation (EC) No. 1272/2008 [CLP]   | REACH Registration Number |
|----------------------------|-----------|-----------|--------------|----------|------------------------------------|---|---------------------------|
| Water                      | 7732-18-5 | 231-791-2 | -            | 60-70    | -                                  | Not classified  | Not applicable            |
| Glycerol                   | 56-81-5   | 200-289-5 | -            | 5-15     | -                                  | Not classified  | Not applicable            |
| Diethylene glycol          | 111-46-6  | 203-872-2 | 603-140-00-6 | 5-9      | -                                  | Acute Tox. 4 (H302)   | 01-2119457857-21-XXXX     |
| Carbon Black               | 1333-86-4 | 215-609-9 | -            | 5-9      | -                                  | Not classified  | 01-2119384822-32-XXXX     |
| 1,2-Benzisothiazolin-3-one | 2634-33-5 | 220-120-9 | 613-088-00-6 | <0.05    | Skin Sens. 1 :: C>=0.05%           | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400) | Not applicable            |

\*\* CONFIDENTIAL

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

**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.

Product Name: LC404BK, LC414BK, LC424BK

**Skin contact:** Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

**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 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, CO<sub>2</sub>, 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 (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>) 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 skin, eyes or clothing

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Prevent substance entering sewers. Washings must be prevented from entering surface water drains.

Product Name: LC404BK, LC414BK, LC424BK

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHK253-01

**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.

**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 skin, eyes or 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

**Section 8: Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure Limits**

| Chemical name                 | European Union | United Kingdom   | France                     | Spain                      | Germany                                  |
|-------------------------------|----------------|--|----------------------------|----------------------------|--|
| Glycerol<br>56-81-5           | -              | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup>  | TWA: 200 mg/m <sup>3</sup>               |
| Diethylene glycol<br>111-46-6 | -              | TWA: 23 ppm<br>TWA: 101 mg/m <sup>3</sup><br>STEL: 69 ppm<br>STEL: 303 mg/m <sup>3</sup> | -                          | -                          | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup> |
| Carbon Black<br>1333-86-4     | -              | TWA: 3.5 mg/m <sup>3</sup><br>STEL: 7 mg/m <sup>3</sup>                                  | TWA: 3.5 mg/m <sup>3</sup> | TWA: 3.5 mg/m <sup>3</sup> | -  |
| Chemical name                 | Italy          | Portugal   | Netherlands                | Finland                    | Denmark                                  |
| Glycerol<br>56-81-5           | -              | TWA: 10 mg/m <sup>3</sup>  | -                          | TWA: 20 mg/m <sup>3</sup>  | -  |

Product Name: LC404BK, LC414BK, LC424BK

|                               |   |   |                           |   |  |
|-------------------------------|---|---|---------------------------|---|--|
| Diethylene glycol<br>111-46-6 | -   | -   | -                         | -   | TWA: 2.5 ppm<br>TWA: 11 mg/m <sup>3</sup>  |
| Carbon Black<br>1333-86-4     | -   | TWA: 3 mg/m <sup>3</sup>  | -                         | TWA: 3.5 mg/m <sup>3</sup><br>STEL: 7 mg/m <sup>3</sup> | TWA: 3.5 mg/m <sup>3</sup>   |
| <b>Chemical name</b>          | <b>Austria</b>  | <b>Switzerland</b>  | <b>Poland</b>             | <b>Norway</b>   | <b>Ireland</b>   |
| Glycerol<br>56-81-5           | -   | TWA: 50 mg/m <sup>3</sup><br>STEL: 100 mg/m <sup>3</sup>                                | TWA: 10 mg/m <sup>3</sup> | -   | -  |
| Diethylene glycol<br>111-46-6 | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup><br>STEL 40 ppm<br>STEL 176 mg/m <sup>3</sup> | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 176 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -   | TWA: 23 ppm<br>TWA: 100 mg/m <sup>3</sup><br>STEL: 69 ppm<br>STEL: 300 mg/m <sup>3</sup> |
| Carbon Black<br>1333-86-4     | -   | -   | TWA: 4 mg/m <sup>3</sup>  | TWA: 3.5 mg/m <sup>3</sup><br>STEL: 7 mg/m <sup>3</sup> | TWA: 3 mg/m <sup>3</sup><br>STEL: 15 mg/m <sup>3</sup>                                   |

**Derived No Effect Level (DNEL)** 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** If there is a risk of contact, Apron, Boots

**Respiratory protection** Use appropriate respiratory protection.

**Environmental exposure controls** Avoid release to the environment.

## Section 9: Physical and chemical properties

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

#### Appearance

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

#### Property

**pH** 7 - 9  
**Melting point / freezing point** < -5 °C  
**Boiling point / boiling range** > 100 °C  
**Flash point** > 94 °C

#### Remarks • Method

Tag Closed Cup, Cleveland Open Cup,

Product Name: LC404BK, LC414BK, LC424BK

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHK253-01

|                                  |                          |                      |
|----------------------------------|--------------------------|----------------------|
| <b>Evaporation rate</b>          | No data available        | None known           |
| <b>Flammability (solid, gas)</b> | No data available        | None known,          |
| <b>Flammability Limit in Air</b> |                          | None known           |
| <b>Upper flammability limit:</b> | No data available        |                      |
| <b>Lower flammability limit:</b> | No data available        |                      |
| <b>Vapor pressure</b>            | No data available        | None known           |
| <b>Vapor density</b>             | No data available        | No data available    |
| <b>Relative density</b>          | 1.0 - 1.1                | (H <sub>2</sub> O=1) |
| <b>Water solubility</b>          | Soluble in water         |                      |
| <b>Solubility(ies)</b>           | No data available        | None known           |
| <b>Partition coefficient</b>     | No data available        | None known           |
| <b>Autoignition temperature</b>  | > 400 °C                 |                      |
| <b>Decomposition temperature</b> | No data available        | None known           |
| <b>Kinematic viscosity</b>       | No data available        | None known           |
| <b>Dynamic viscosity</b>         | 2 - 5 mPa s              |                      |
| <b>Explosive properties</b>      | No information available |                      |
| <b>Oxidizing properties</b>      | No information available |                      |

## **9.2. Other information**

### **9.2.1. Information with regard to physical hazard classes**

No information available

### **9.2.2. Other safety characteristics**

No information available

## **Section 10: Stability and reactivity**

### **10.1. Reactivity**

None.

### **10.2. Chemical stability**

Stable under normal conditions.

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

None under normal processing.

### **10.4. Conditions to avoid**

Keep away from heat. Keep away from water or moist air.

### **10.5. Incompatible materials**

Acids, Bases, Oxidizing agent, Reducing agent

### **10.6. Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of sulfur

Product Name: LC404BK, LC414BK, LC424BK

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHK253-01

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Product Information

|  |  |
|--|--|
| <b>Inhalation</b>                        | No information available   |
| <b>Eye contact</b>                       | No information available   |
| <b>Skin contact:</b>                     | No information available   |
| <b>Ingestion</b>                         | Acute LD <sub>50</sub> > 2000 mg/kg (OECD 420 method)  |
| <b>Skin corrosion/irritation</b>         | Non-irritant (OECD 404 method)   |
| <b>Serious eye damage/eye irritation</b> | Minimal irritant to the eye (OECD 405 method)  |
| <b>Respiratory or skin sensitization</b> | Respiratory sensitization : No information available<br>It is not a skin sensitizer (OECD 429 method)  |
| <b>Germ cell mutagenicity</b>            | AMES test : Negative (OECD 471 method)   |
| <b>Carcinogenicity</b>                   | 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.<br><br>Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | No information available.  |
| <b>STOT - repeated exposure</b>          | No information available   |
| <b>Aspiration hazard</b>                 | No information available.  |
| <b>Potential health effects</b>          | Eye : May cause slight irritation<br>Skin : Prolonged exposure may cause skin irritation<br>Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea<br>Inhalation : Not an expected route of exposure   |

### 11.2. Information on other hazards

No information available

Product Name: LC404BK, LC414BK, LC424BK

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHK253-01

## Section 12: Ecological information

### 12.1. Toxicity

#### Ecotoxicity

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

| Chemical name     | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea                                     |
|-------------------|----------------------|--|----------------------------|---|
| Glycerol          | -                    | LC50: 51 - 57mL/L (96h, <i>Oncorhynchus mykiss</i> ) | -                          | -   |
| Diethylene glycol | -                    | LC50: =75200mg/L (96h, <i>Pimephales promelas</i> )  | EC50 = 29228 mg/L 15 min   | EC50: =84000mg/L (48h, <i>Daphnia magna</i> ) |
| Carbon Black      | -                    | -  | -                          | -   |

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

There is no data for this product.

#### Component Information

| Chemical name              | Partition coefficient |
|----------------------------|-----------------------|
| Glycerol                   | -1.76                 |
| Diethylene glycol          | -1.98                 |
| 1,2-Benzisothiazolin-3-one | 1.3                   |

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Endocrine disrupting properties

No information available.

### 12.7. Other adverse effects

No information available.

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

Dispose in accordance with federal, state and local regulations.

## Section 14: Transport information

#### IMDG

14.1 UN/ID no Not regulated

Product Name: LC404BK, LC414BK, LC424BK

14.2 Proper shipping name Not regulated  
14.3 Hazard Class Not regulated  
14.4 Packing group Not regulated  
14.5 Marine pollutant Not applicable  
14.6 Special Provisions None  
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

**RID**

14.1 UN/ID no Not regulated  
14.2 Proper shipping name Not regulated  
14.3 Hazard Class Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazard Not applicable  
14.6 Special Provisions None

**ADR**

14.1 UN/ID no Not regulated  
14.2 Proper shipping name Not regulated  
14.3 Hazard Class Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazard Not applicable  
14.6 Special Provisions None

**IATA**

14.1 UN/ID no Not regulated  
14.2 Proper shipping name Not regulated  
14.3 Hazard Class Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazard Not applicable  
14.6 Special Provisions None

**Section 15: Regulatory information**

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

**EU-Regulations**

- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.
- \* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

**National Regulations**

No information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out.

Revision Date: -

Issuing Date: 08-Jan-2021

Revision Number: 1

Safety data sheet number: BHK253-01

Product Name: LC404BK, LC414BK, LC424BK

## 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

H400 - Very toxic to aquatic life

#### Legend

SVHC: Substances of Very High Concern for Authorization:

TWA TWA (time-weighted average)

Ceiling Ceiling Limit Value

STEL

\*\*

STEL (Short Term Exposure Limit)

Trade secret

#### Key literature references and sources for data

No information available

Revision Date -

Issuing Date 08-Jan-2021

#### Revision Note

No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

#### Disclaimer

The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).

Product Name: LC404M, LC414M, LC424M

Revision Date: -  
Issuing Date: 08-Jan-2021

Revision Number: 1  
Safety data sheet number: BHM253-01

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

### 1.1. Product identifier

Product Name LC404M, LC414M, LC424M  
Product Form Mixture  
Safety data sheet number BHM253-01

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

Relevant identified uses These products are dark red 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

Importer (Europe)  
Brother International Europe Ltd.  
1 Tame Street, Audenshaw, Manchester M34 5JE, UK  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands  
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

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

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

## Section 2: Hazard(s) 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

*Regulation (EC) No 1272/2008*

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

Product Name: LC404M, LC414M, LC424M

EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction.

**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).

**Section 3: Composition/information on ingredients**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name              | CAS No    | EC No     | EC Index No  | Weight-% | Specific concentration limit (SCL) | Classification according to Regulation (EC) No. 1272/2008 [CLP]   | REACH Registration Number |
|----------------------------|-----------|-----------|--------------|----------|------------------------------------|---|---------------------------|
| Water                      | 7732-18-5 | 231-791-2 | -            | 65-80    | -                                  | Not classified  | Not applicable            |
| Glycerol                   | 56-81-5   | 200-289-5 | -            | 10-20    | -                                  | Not classified  | Not applicable            |
| Magenta Dye                | **        | **        | **           | <2.5     | -                                  | Eye Irrit. 2 (H319)<br>Aquatic Chronic 3 (H412)   | Registered                |
| 1,2-Benzisothiazolin-3-one | 2634-33-5 | 220-120-9 | 613-088-00-6 | <0.05    | Skin Sens. 1 :: C>=0.05%           | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400) | Not applicable            |

\*\* CONFIDENTIAL

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

**Section 4: First aid measures**

**4.1. Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | If symptoms persist, call a physician.   |
| <b>Inhalation</b>     | Remove to fresh air. Get immediate medical advice/attention.   |
| <b>Eye contact</b>    | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention. |

Product Name: LC404M, LC414M, LC424M

**Skin contact:** Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

**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 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, CO<sub>2</sub>, 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 (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>) 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 skin, eyes or clothing

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Prevent substance entering sewers. Washings must be prevented from entering surface water drains.

Product Name: LC404M, LC414M, LC424M

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHM253-01

**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.

**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 skin, eyes or 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

**Section 8: Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure Limits**

| Chemical name       | European Union | United Kingdom   | France                    | Spain                     | Germany                    |
|---------------------|----------------|--|---------------------------|---------------------------|----------------------------|
| Glycerol<br>56-81-5 | -              | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | TWA: 200 mg/m <sup>3</sup> |
| Chemical name       | Italy          | Portugal   | Netherlands               | Finland                   | Denmark                    |
| Glycerol<br>56-81-5 | -              | TWA: 10 mg/m <sup>3</sup>                                | -                         | TWA: 20 mg/m <sup>3</sup> | -                          |
| Chemical name       | Austria        | Switzerland  | Poland                    | Norway                    | Ireland                    |
| Glycerol<br>56-81-5 | -              | TWA: 50 mg/m <sup>3</sup><br>STEL: 100 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -                         | -                          |

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

Product Name: LC404M, LC414M, LC424M

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021

Revision Number: 1  
Safety data sheet number: BHM253-01

**8.2. Exposure controls**

|   |  |
|---|--|
| <b>Appropriate engineering controls</b> | Good general ventilation should be sufficient under normal use.  |
| <b>Personal protective equipment</b>    | Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied: |
| <b>Eye/face protection</b>              | Safety goggles.  |
| <b>Hand protection</b>                  | Protective gloves.   |
| <b>Skin and body protection</b>         | If there is a risk of contact:, Apron, Boots   |
| <b>Respiratory protection</b>           | Use appropriate respiratory protection.  |
| <b>Environmental exposure controls</b>  | Avoid release to the environment.  |

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Appearance</b>     |                          |
| Physical state        | Liquid                   |
| Color                 | dark red                 |
| <b>Odor</b>           | Slight                   |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                | <u>Values</u>            | <u>Remarks • Method</u>             |
|--------------------------------|--------------------------|-------------------------------------|
| pH                             | 7 - 9                    |                                     |
| Melting point / freezing point | < No data available °C   |                                     |
| Boiling point / boiling range  | > 100 °C                 |                                     |
| Flash point                    | > 94 °C                  | Tag Closed Cup, Cleveland Open Cup, |
| Evaporation rate               | No data available        | None known                          |
| Flammability (solid, gas)      | No data available        | None known,                         |
| Flammability Limit in Air      |                          | None known                          |
| Upper flammability limit:      | No data available        |                                     |
| Lower flammability limit:      | No data available        |                                     |
| Vapor pressure                 | No data available        | None known                          |
| Vapor density                  | No data available        | None known                          |
| Relative density               | 1.0 - 1.1                | (H <sub>2</sub> O=1)                |
| Water solubility               | Soluble in water         |                                     |
| Solubility(ies)                | No data available        | None known                          |
| Partition coefficient          | No data available        | None known                          |
| Autoignition temperature       | > > 400 °C               |                                     |
| Decomposition temperature      | No data available        | None known                          |
| Kinematic viscosity            | No data available        | None known                          |
| Dynamic viscosity              | 2 - 5 mPa s              |                                     |
| Explosive properties           | No information available |                                     |
| Oxidizing properties           | No information available |                                     |

Product Name: LC404M, LC414M, LC424M

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes**

No information available

**9.2.2. Other safety characteristics**

No information available

**Section 10: Stability and reactivity**

**10.1. Reactivity**

None.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal processing.

**10.4. Conditions to avoid**

Keep away from heat. Keep away from water or moist air.

**10.5. Incompatible materials**

Acids, Bases, Oxidizing agent, Reducing agent

**10.6. Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of sulfur

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Product Information**

|                                  |   |
|----------------------------------|---|
| <b>Inhalation</b>                | No information available                              |
| <b>Eye contact</b>               | No information available                              |
| <b>Skin contact:</b>             | No information available                              |
| <b>Ingestion</b>                 | Acute LD <sub>50</sub> > 2000 mg/kg (OECD 420 method) |
| <b>Skin corrosion/irritation</b> | Non-irritant (OECD 404 method)                        |

Product Name: LC404M, LC414M, LC424M

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021

Revision Number: 1  
Safety data sheet number: BHM253-01

|  |  |
|--|--|
| <b>Serious eye damage/eye irritation</b> | Minimal irritant to the eye (OECD 405 method)  |
| <b>Respiratory or skin sensitization</b> | Respiratory sensitization : No information available<br>It is not a skin sensitizer (OECD 429 method)  |
| <b>Germ cell mutagenicity</b>            | AMES test : Negative (OECD 471 method)   |
| <b>Carcinogenicity</b>                   | Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA   |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | No information available.  |
| <b>STOT - repeated exposure</b>          | No information available   |
| <b>Aspiration hazard</b>                 | No information available.  |
| <b>Potential health effects</b>          | Eye : May cause slight irritation<br>Skin : Prolonged exposure may cause skin irritation<br>Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea<br>Inhalation : Not an expected route of exposure |

**11.2. Information on other hazards**

No information available

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity**

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

| Chemical name | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|---------------|----------------------|--|----------------------------|-----------|
| Glycerol      | -                    | LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss) | -                          | -         |

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

There is no data for this product.

**Component Information**

| Chemical name              | Partition coefficient |
|----------------------------|-----------------------|
| Glycerol                   | -1.76                 |
| 1,2-Benzisothiazolin-3-one | 1.3                   |

**12.4. Mobility in soil**

No information available.

Product Name: LC404M, LC414M, LC424M

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

Dispose in accordance with federal, state and local regulations.

**Section 14: Transport information**

**IMDG**

|   |                |
|---|----------------|
| 14.1 UN/ID no   | Not regulated  |
| 14.2 Proper shipping name   | Not regulated  |
| 14.3 Hazard Class   | Not regulated  |
| 14.4 Packing group  | Not regulated  |
| 14.5 Marine pollutant   | Not applicable |
| 14.6 Special Provisions   | None           |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable |

**RID**

|                           |                |
|---------------------------|----------------|
| 14.1 UN/ID no             | Not regulated  |
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions   | None           |

**ADR**

|                           |                |
|---------------------------|----------------|
| 14.1 UN/ID no             | Not regulated  |
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions   | None           |

**IATA**

|                           |                |
|---------------------------|----------------|
| 14.1 UN/ID no             | Not regulated  |
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |

Product Name: LC404M, LC414M, LC424M

Revision Date: -  
Issuing Date: 08-Jan-2021

Revision Number: 1  
Safety data sheet number: BHM253-01

14.6 Special Provisions None

## Section 15: Regulatory information

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

#### EU-Regulations

- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.
- \* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

#### National Regulations

No information available

### 15.2. Chemical safety assessment

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  
H319 - Causes serious eye irritation  
H400 - Very toxic to aquatic life

#### Legend

SVHC: Substances of Very High Concern for Authorization:

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Ceiling Limit Value         | **   | Trade secret                     |

#### Key literature references and sources for data

No information available

Revision Date -

Issuing Date 08-Jan-2021

#### Revision Note

No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

#### Disclaimer

The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

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

### 1.1. Product identifier

**Product Name** LC404Y, LC414Y, LC424Y  
**Product Form** Mixture  
**Safety data sheet number** BHY253-01

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

**Relevant identified uses** These products are dark yellow 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

**Importer** (Europe)  
Brother International Europe Ltd.  
1 Tame Street, Audenshaw, Manchester M34 5JE, UK  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands  
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

**Emergency Telephone** CHEMTREC +1-703-527-3887 (International)

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

## Section 2: Hazard(s) 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

**Regulation (EC) No 1272/2008**

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

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction.

**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).

**Section 3: Composition/information on ingredients**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name                       | CAS No    | EC No     | EC Index No  | Weight-% | Specific concentration limit (SCL)                 | Classification according to Regulation (EC) No. 1272/2008 [CLP]   | REACH Registration Number |
|-------------------------------------|-----------|-----------|--------------|----------|--|---|---------------------------|
| Water                               | 7732-18-5 | 231-791-2 | -            | 65-80    | -  | Not classified  | Not applicable            |
| Glycerol                            | 56-81-5   | 200-289-5 | -            | 5-15     | -  | Not classified  | Not applicable            |
| Triethylene glycol, monobutyl ether | 143-22-6  | 205-592-6 | 603-183-00-0 | 1-5      | Eye Dam. 1 :: C>=30%<br>Eye Irrit. 2 :: 20%<=C<30% | Eye Dam. 1 (H318)   | 01-2119475107-38-XXXX     |
| 1,2-Benzisothiazolin-3-one          | 2634-33-5 | 220-120-9 | 613-088-00-6 | <0.05    | Skin Sens. 1 :: C>=0.05%                           | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400) | Not applicable            |

\*\* CONFIDENTIAL

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

**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.

Product Name: LC404Y, LC414Y, LC424Y

|                      |  |
|----------------------|--|
| <b>Eye contact</b>   | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention. |
| <b>Skin contact:</b> | Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.                       |
| <b>Ingestion</b>     | 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**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | 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 breathing. Sneezing. Coughing |
|-----------------|---|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

**Section 5: Firefighting measures**

**5.1. Extinguishing media**

|                                       |   |
|---------------------------------------|---|
| <b>Suitable Extinguishing Media</b>   | Dry chemical, CO <sub>2</sub> , water spray or regular foam |
| <b>Unsuitable extinguishing media</b> | None  |

**5.2. Special hazards arising from the substance or mixture**

|   |  |
|---|--|
| <b>Specific hazards arising from the chemical</b> | Thermal decomposition can lead to release of irritating and toxic gases and vapors Carbon monoxide Carbon dioxide (CO <sub>2</sub> ) Nitrogen oxides (NO <sub>x</sub> ) Oxides of sulfur |
|---|--|

**5.3. Advice for firefighters**

|   |   |
|---|---|
| <b>Special protective equipment for fire-fighters</b> | Wear self contained breathing apparatus for fire fighting if necessary. |
|---|---|

**Section 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

|                                    |   |
|------------------------------------|---|
| <b>For non-emergency personnel</b> | Avoid contact with skin, eyes or clothing         |
| <b>For emergency responders</b>    | Use personal protection recommended in Section 8. |

**6.2. Environmental precautions**

|                                  |   |
|----------------------------------|---|
| <b>Environmental precautions</b> | Prevent substance entering sewers. Washings must be prevented from entering surface water drains. |
|----------------------------------|---|

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

**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.

**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 skin, eyes or 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

**Section 8: Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure Limits**

| Chemical name       | European Union | United Kingdom   | France                    | Spain                     | Germany                    |
|---------------------|----------------|--|---------------------------|---------------------------|----------------------------|
| Glycerol<br>56-81-5 | -              | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup>  | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | TWA: 200 mg/m <sup>3</sup> |
| Chemical name       | Italy          | Portugal   | Netherlands               | Finland                   | Denmark                    |
| Glycerol<br>56-81-5 | -              | TWA: 10 mg/m <sup>3</sup>                                | -                         | TWA: 20 mg/m <sup>3</sup> | -                          |
| Chemical name       | Austria        | Switzerland  | Poland                    | Norway                    | Ireland                    |
| Glycerol<br>56-81-5 | -              | TWA: 50 mg/m <sup>3</sup><br>STEL: 100 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -                         | -                          |

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

**8.2. Exposure controls**

|   |  |
|---|--|
| <b>Appropriate engineering controls</b> | Good general ventilation should be sufficient under normal use.  |
| <b>Personal protective equipment</b>    | Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied: |
| <b>Eye/face protection</b>              | Safety goggles.  |
| <b>Hand protection</b>                  | Protective gloves.   |
| <b>Skin and body protection</b>         | If there is a risk of contact:, Apron, Boots   |
| <b>Respiratory protection</b>           | Use appropriate respiratory protection.  |
| <b>Environmental exposure controls</b>  | Avoid release to the environment.  |

**Section 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Appearance</b>     |                          |
| <b>Physical state</b> | Liquid                   |
| <b>Color</b>          | dark yellow              |
| <b>Odor</b>           | Slight                   |
| <b>Odor threshold</b> | No information available |

| Property                              | Values                   | Remarks • Method                    |
|---------------------------------------|--------------------------|-------------------------------------|
| <b>pH</b>                             | 7 - 9                    |                                     |
| <b>Melting point / freezing point</b> | < No data available °C   |                                     |
| <b>Boiling point / boiling range</b>  | > 100 °C                 |                                     |
| <b>Flash point</b>                    | > 94 °C                  | Tag Closed Cup, Cleveland Open Cup, |
| <b>Evaporation rate</b>               | No data available        | None known                          |
| <b>Flammability (solid, gas)</b>      | No data available        | None known,                         |
| <b>Flammability Limit in Air</b>      |                          | None known                          |
| <b>Upper flammability limit:</b>      | No data available        |                                     |
| <b>Lower flammability limit:</b>      | No data available        |                                     |
| <b>Vapor pressure</b>                 | No data available        | None known                          |
| <b>Vapor density</b>                  | No data available        | None known                          |
| <b>Relative density</b>               | 1.0 - 1.1                | (H <sub>2</sub> O=1)                |
| <b>Water solubility</b>               | Soluble in water         |                                     |
| <b>Solubility(ies)</b>                | No data available        | None known                          |
| <b>Partition coefficient</b>          | No data available        | None known                          |
| <b>Autoignition temperature</b>       | > 400 °C                 |                                     |
| <b>Decomposition temperature</b>      | No data available        | None known                          |
| <b>Kinematic viscosity</b>            | No data available        | None known                          |
| <b>Dynamic viscosity</b>              | 2 - 5 mPa s              |                                     |
| <b>Explosive properties</b>           | No information available |                                     |
| <b>Oxidizing properties</b>           | No information available |                                     |

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

---

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes**

No information available

**9.2.2. Other safety characteristics**

No information available

**Section 10: Stability and reactivity**

**10.1. Reactivity**

None.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal processing.

**10.4. Conditions to avoid**

Keep away from heat. Keep away from water or moist air.

**10.5. Incompatible materials**

Acids, Bases, Oxidizing agent, Reducing agent

**10.6. Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of sulfur

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Product Information**

|                                  |   |
|----------------------------------|---|
| <b>Inhalation</b>                | No information available                              |
| <b>Eye contact</b>               | No information available                              |
| <b>Skin contact:</b>             | No information available                              |
| <b>Ingestion</b>                 | Acute LD <sub>50</sub> > 2000 mg/kg (OECD 420 method) |
| <b>Skin corrosion/irritation</b> | Non-irritant (OECD 404 method)                        |

Product Name: LC404Y, LC414Y, LC424Y

|  |  |
|--|--|
| <b>Serious eye damage/eye irritation</b> | Minimal irritant to the eye (OECD 405 method)  |
| <b>Respiratory or skin sensitization</b> | Respiratory sensitization : No information available<br>It is not a skin sensitizer (OECD 429 method)  |
| <b>Germ cell mutagenicity</b>            | AMES test : Negative (OECD 471 method)   |
| <b>Carcinogenicity</b>                   | Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA   |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | No information available.  |
| <b>STOT - repeated exposure</b>          | No information available   |
| <b>Aspiration hazard</b>                 | No information available.  |
| <b>Potential health effects</b>          | Eye : May cause slight irritation<br>Skin : Prolonged exposure may cause skin irritation<br>Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea<br>Inhalation : Not an expected route of exposure |

**11.2. Information on other hazards**

No information available

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity**

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

| Chemical name                       | Algae/aquatic plants                          | Fish   | Toxicity to microorganisms | Crustacea                           |
|-------------------------------------|---|--|----------------------------|-------------------------------------|
| Glycerol                            | -   | LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss) | -                          | -                                   |
| Triethylene glycol, monobutyl ether | EC50: >500mg/L (72h, Desmodesmus subspicatus) | LC50: ≈2400mg/L (96h, Pimephales promelas)   | -                          | EC50: >500mg/L (48h, Daphnia magna) |

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

There is no data for this product.

**Component Information**

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Glycerol      | -1.76                 |

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

|                                     |      |
|-------------------------------------|------|
| Triethylene glycol, monobutyl ether | 0.51 |
| 1,2-Benzisothiazolin-3-one          | 1.3  |

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

Dispose in accordance with federal, state and local regulations.

**Section 14: Transport information**

**IMDG**

- 14.1 UN/ID no Not regulated
- 14.2 Proper shipping name Not regulated
- 14.3 Hazard Class Not regulated
- 14.4 Packing group Not regulated
- 14.5 Marine pollutant Not applicable
- 14.6 Special Provisions None
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

**RID**

- 14.1 UN/ID no Not regulated
- 14.2 Proper shipping name Not regulated
- 14.3 Hazard Class Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazard Not applicable
- 14.6 Special Provisions None

**ADR**

- 14.1 UN/ID no Not regulated
- 14.2 Proper shipping name Not regulated
- 14.3 Hazard Class Not regulated
- 14.4 Packing group Not regulated
- 14.5 Environmental hazard Not applicable
- 14.6 Special Provisions None

Product Name: LC404Y, LC414Y, LC424Y

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHY253-01

**IATA**

|                                  |                |
|----------------------------------|----------------|
| <b>14.1 UN/ID no</b>             | Not regulated  |
| <b>14.2 Proper shipping name</b> | Not regulated  |
| <b>14.3 Hazard Class</b>         | Not regulated  |
| <b>14.4 Packing group</b>        | Not regulated  |
| <b>14.5 Environmental hazard</b> | Not applicable |
| <b>14.6 Special Provisions</b>   | None           |

**Section 15: Regulatory information**

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

**EU-Regulations**

- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.
- \* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

**National Regulations**

No information available

**15.2. Chemical safety assessment**

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
- H400 - Very toxic to aquatic life

**Legend**

SVHC: Substances of Very High Concern for Authorization:

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Ceiling Limit Value         | **   | Trade secret                     |

**Key literature references and sources for data**

No information available

**Revision Date** -

**Issuing Date** 08-Jan-2021

**Revision Note**

No information available

**Revision Date:** -

**Issuing Date:** 08-Jan-2021

**Revision Number:** 1

**Safety data sheet number:** BHY253-01

Product Name: LC404Y, LC414Y, LC424Y

---

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

**The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).**

Product Name: LC404C, LC414C, LC424C

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHC253-01

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

### 1.1. Product identifier

Product Name LC404C, LC414C, LC424C  
Product Form Mixture  
Safety data sheet number BHC253-01

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

**Relevant identified uses** These products are dark blue 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

**Importer** (Europe)  
Brother International Europe Ltd.  
1 Tame Street, Audenshaw, Manchester M34 5JE, UK  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands  
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

**Emergency Telephone** CHEMTREC +1-703-527-3887 (International)

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

## Section 2: Hazard(s) 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

#### Regulation (EC) No 1272/2008

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

EUH208 - Contains 1,2-Benzisothiazolin-3-one May produce an allergic reaction.

Product Name: LC404C, LC414C, LC424C

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHC253-01

**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).

**Section 3: Composition/information on ingredients**

**3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name                       | CAS No    | EC No     | EC Index No  | Weight-% | Specific concentration limit (SCL)                 | Classification according to Regulation (EC) No. 1272/2008 [CLP]   | REACH Registration Number |
|-------------------------------------|-----------|-----------|--------------|----------|--|---|---------------------------|
| Water                               | 7732-18-5 | 231-791-2 | -            | 65-75    | -  | Not classified  | Not applicable            |
| Glycerol                            | 56-81-5   | 200-289-5 | -            | 10-20    | -  | Not classified  | Not applicable            |
| Triethylene glycol, monobutyl ether | 143-22-6  | 205-592-6 | 603-183-00-0 | 1-5      | Eye Dam. 1 :: C>=30%<br>Eye Irrit. 2 :: 20%<=C<30% | Eye Dam. 1 (H318)   | 01-2119475107-38-XXXX     |
| Diethylene glycol                   | 111-46-6  | 203-872-2 | 603-140-00-6 | 5-9      | -  | Acute Tox. 4 (H302)   | 01-2119457857-21-XXXX     |
| 1,2-Benzisothiazolin-3-one          | 2634-33-5 | 220-120-9 | 613-088-00-6 | <0.05    | Skin Sens. 1 :: C>=0.05%                           | Acute Tox. 4 (H302)<br>Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1 (H317)<br>Aquatic Acute 1 (H400) | Not applicable            |

\*\* CONFIDENTIAL

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

**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.

Product Name: LC404C, LC414C, LC424C

|                      |  |
|----------------------|--|
| <b>Eye contact</b>   | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention. |
| <b>Skin contact:</b> | Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.                       |
| <b>Ingestion</b>     | 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**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | 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 breathing. Sneezing. Coughing |
|-----------------|---|

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

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

**Section 5: Firefighting measures**

**5.1. Extinguishing media**

|                                       |   |
|---------------------------------------|---|
| <b>Suitable Extinguishing Media</b>   | Dry chemical, CO <sub>2</sub> , water spray or regular foam |
| <b>Unsuitable extinguishing media</b> | None  |

**5.2. Special hazards arising from the substance or mixture**

|   |  |
|---|--|
| <b>Specific hazards arising from the chemical</b> | Thermal decomposition can lead to release of irritating and toxic gases and vapors Carbon monoxide Carbon dioxide (CO <sub>2</sub> ) Nitrogen oxides (NO <sub>x</sub> ) Oxides of sulfur |
|---|--|

**5.3. Advice for firefighters**

|   |   |
|---|---|
| <b>Special protective equipment for fire-fighters</b> | Wear self contained breathing apparatus for fire fighting if necessary. |
|---|---|

**Section 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

|                                    |   |
|------------------------------------|---|
| <b>For non-emergency personnel</b> | Avoid contact with skin, eyes or clothing         |
| <b>For emergency responders</b>    | Use personal protection recommended in Section 8. |

**6.2. Environmental precautions**

|                                  |   |
|----------------------------------|---|
| <b>Environmental precautions</b> | Prevent substance entering sewers. Washings must be prevented from entering surface water drains. |
|----------------------------------|---|

Product Name: LC404C, LC414C, LC424C

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHC253-01

**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.

**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 skin, eyes or 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

**Section 8: Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure Limits**

| Chemical name                 | European Union | United Kingdom   | France                    | Spain                     | Germany                                   |
|-------------------------------|----------------|--|---------------------------|---------------------------|---|
| Glycerol<br>56-81-5           | -              | TWA: 10 mg/m <sup>3</sup><br>STEL: 30 mg/m <sup>3</sup>                                  | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | TWA: 200 mg/m <sup>3</sup>                |
| Diethylene glycol<br>111-46-6 | -              | TWA: 23 ppm<br>TWA: 101 mg/m <sup>3</sup><br>STEL: 69 ppm<br>STEL: 303 mg/m <sup>3</sup> | -                         | -                         | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup>  |
| Chemical name                 | Italy          | Portugal   | Netherlands               | Finland                   | Denmark                                   |
| Glycerol<br>56-81-5           | -              | TWA: 10 mg/m <sup>3</sup>  | -                         | TWA: 20 mg/m <sup>3</sup> | -   |
| Diethylene glycol<br>111-46-6 | -              | -  | -                         | -                         | TWA: 2.5 ppm<br>TWA: 11 mg/m <sup>3</sup> |

Product Name: LC404C, LC414C, LC424C

| Chemical name                 | Austria   | Switzerland   | Poland                    | Norway | Ireland  |
|-------------------------------|---|---|---------------------------|--------|--|
| Glycerol<br>56-81-5           | -   | TWA: 50 mg/m <sup>3</sup><br>STEL: 100 mg/m <sup>3</sup>                                | TWA: 10 mg/m <sup>3</sup> | -      | -  |
| Diethylene glycol<br>111-46-6 | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup><br>STEL 40 ppm<br>STEL 176 mg/m <sup>3</sup> | TWA: 10 ppm<br>TWA: 44 mg/m <sup>3</sup><br>STEL: 40 ppm<br>STEL: 176 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | -      | TWA: 23 ppm<br>TWA: 100 mg/m <sup>3</sup><br>STEL: 69 ppm<br>STEL: 300 mg/m <sup>3</sup> |

**Derived No Effect Level (DNEL)** 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** If there is a risk of contact:, Apron, Boots

**Respiratory protection** Use appropriate respiratory protection.

**Environmental exposure controls** Avoid release to the environment.

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

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

#### Appearance

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Color          | dark blue                |
| Odor           | Slight                   |
| Odor threshold | No information available |

#### Property

| <u>Property</u>                | <u>Values</u>     |
|--------------------------------|-------------------|
| pH                             | 7 - 9             |
| Melting point / freezing point | < -5 °C           |
| Boiling point / boiling range  | > 100 °C          |
| Flash point                    | > 94 °C           |
| Evaporation rate               | No data available |
| Flammability (solid, gas)      | No data available |
| Flammability Limit in Air      |                   |
| Upper flammability limit:      | No data available |
| Lower flammability limit:      | No data available |
| Vapor pressure                 | No data available |

#### Remarks • Method

Tag Closed Cup, Cleveland Open Cup,  
None known  
None known,  
None known  
None known

Product Name: LC404C, LC414C, LC424C

|                                  |                          |                      |
|----------------------------------|--------------------------|----------------------|
| <b>Vapor density</b>             | No data available        | None known           |
| <b>Relative density</b>          | 1.0 - 1.1                | (H <sub>2</sub> O=1) |
| <b>Water solubility</b>          | Soluble in water         |                      |
| <b>Solubility(ies)</b>           | No data available        | None known           |
| <b>Partition coefficient</b>     | No data available        | None known           |
| <b>Autoignition temperature</b>  | > 400 °C                 |                      |
| <b>Decomposition temperature</b> | No data available        | None known           |
| <b>Kinematic viscosity</b>       | No data available        | None known           |
| <b>Dynamic viscosity</b>         | 2 - 5 mPa s              |                      |
| <b>Explosive properties</b>      | No information available |                      |
| <b>Oxidizing properties</b>      | No information available |                      |

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No information available

### 9.2.2. Other safety characteristics

No information available

## **Section 10: Stability and reactivity**

### 10.1. Reactivity

None.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal processing.

### 10.4. Conditions to avoid

Keep away from heat. Keep away from water or moist air.

### 10.5. Incompatible materials

Acids, Bases, Oxidizing agent, Reducing agent

### 10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Oxides of sulfur

## **Section 11: Toxicological information**

### 11.1. Information on toxicological effects

Product Name: LC404C, LC414C, LC424C

**Product Information**

|  |  |
|--|--|
| <b>Inhalation</b>                        | No information available   |
| <b>Eye contact</b>                       | No information available   |
| <b>Skin contact:</b>                     | No information available   |
| <b>Ingestion</b>                         | Acute LD <sub>50</sub> > 2000 mg/kg (OECD 420 method)  |
| <b>Skin corrosion/irritation</b>         | Non-irritant (OECD 404 method)   |
| <b>Serious eye damage/eye irritation</b> | Minimal irritant to the eye (OECD 405 method)  |
| <b>Respiratory or skin sensitization</b> | Respiratory sensitization : No information available<br>It is not a skin sensitizer (OECD 429 method)  |
| <b>Germ cell mutagenicity</b>            | AMES test : Negative (OECD 471 method)   |
| <b>Carcinogenicity</b>                   | Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA   |
| <b>Reproductive toxicity</b>             | No information available.  |
| <b>STOT - single exposure</b>            | No information available.  |
| <b>STOT - repeated exposure</b>          | No information available   |
| <b>Aspiration hazard</b>                 | No information available.  |
| <b>Potential health effects</b>          | Eye : May cause slight irritation<br>Skin : Prolonged exposure may cause skin irritation<br>Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea<br>Inhalation : Not an expected route of exposure |

**11.2. Information on other hazards**

No information available

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity**

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

| 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> ) |

Product Name: LC404C, LC414C, LC424C

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHC253-01

|                   |   |   |                          |                                       |
|-------------------|---|---|--------------------------|---------------------------------------|
| Diethylene glycol | - | LC50: =75200mg/L (96h, Pimephales promelas) | EC50 = 29228 mg/L 15 min | EC50: =84000mg/L (48h, Daphnia magna) |
|-------------------|---|---|--------------------------|---------------------------------------|

**12.2. Persistence and degradability**

No information available.

**12.3. Bioaccumulative potential**

There is no data for this product.

**Component Information**

| Chemical name                       | Partition coefficient |
|-------------------------------------|-----------------------|
| Glycerol                            | -1.76                 |
| Triethylene glycol, monobutyl ether | 0.51                  |
| Diethylene glycol                   | -1.98                 |
| 1,2-Benzisothiazolin-3-one          | 1.3                   |

**12.4. Mobility in soil**

No information available.

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Endocrine disrupting properties**

No information available.

**12.7. Other adverse effects**

No information available.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

Dispose in accordance with federal, state and local regulations.

**Section 14: Transport information**

**IMDG**

|   |                |
|---|----------------|
| 14.1 UN/ID no   | Not regulated  |
| 14.2 Proper shipping name   | Not regulated  |
| 14.3 Hazard Class   | Not regulated  |
| 14.4 Packing group  | Not regulated  |
| 14.5 Marine pollutant   | Not applicable |
| 14.6 Special Provisions   | None           |
| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable |

**RID**

|               |               |
|---------------|---------------|
| 14.1 UN/ID no | Not regulated |
|---------------|---------------|

Product Name: LC404C, LC414C, LC424C

Revision Date: -  
Issuing Date: 08-Jan-2021  
Revision Number: 1  
Safety data sheet number: BHC253-01

|                           |                |
|---------------------------|----------------|
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions   | None           |

**ADR**

|                           |                |
|---------------------------|----------------|
| 14.1 UN/ID no             | Not regulated  |
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions   | None           |

**IATA**

|                           |                |
|---------------------------|----------------|
| 14.1 UN/ID no             | Not regulated  |
| 14.2 Proper shipping name | Not regulated  |
| 14.3 Hazard Class         | Not regulated  |
| 14.4 Packing group        | Not regulated  |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions   | None           |

**Section 15: Regulatory information**

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

**EU-Regulations**

- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.
- \* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- \* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

**National Regulations**

No information available

**15.2. Chemical safety assessment**

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
- H400 - Very toxic to aquatic life

Product Name: LC404C, LC414C, LC424C

**Revision Date:** -  
**Issuing Date:** 08-Jan-2021  
**Revision Number:** 1  
**Safety data sheet number:** BHC253-01

---

**Legend**

SVHC: Substances of Very High Concern for Authorization:

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Ceiling Limit Value         | **   | Trade secret                     |

**Key literature references and sources for data**

No information available

**Revision Date** -

**Issuing Date** 08-Jan-2021

**Revision Note**

No information available

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).