

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C,  
LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C,  
LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C,  
LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

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

### **1.1. Product identifier**

**Product Name** LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C,  
LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C,  
LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C,  
LC3619C, LC3717C, LC3719C, LC3919C

**Product Form** Mixture

**Safety data sheet number** BHC071

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

**Relevant identified uses** Water based ink for inkjet printing machine

**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]

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

## 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.

## 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-%	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	-	15-25	Not classified	Not applicable
Triethylene glycol, monobutyl ether	143-22-6	205-592-6	603-183-00-0	1-5	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	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) 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

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C,  
LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C,  
LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C,  
LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

---

<b>General advice</b>	If symptoms persist, call a physician.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. 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.
<b>Skin contact:</b>	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
<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**

**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 (NOx) , 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**

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

**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 entry into waterways, sewers, basements or confined areas.

**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 56-81-5	-	TWA: 10 mg/m <sup>3</sup> 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>

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol 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 56-81-5	-	TWA: 50 mg/m <sup>3</sup> STEL: 100 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup> STEL: 30 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** Apron, Boots

**Respiratory protection** None under normal use conditions. In case of large spillages: Wear suitable respiratory protective equipment.

**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

**pH** 7 - 9  
**Melting point / freezing point** < -5 °C  
**Boiling point / boiling range** > 100 °C  
**Flash point** > 93.3 °C  
**Evaporation rate** No data available  
**Flammability (solid, gas)** No data available  
**Flammability Limit in Air**

#### Remarks • Method

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

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

<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>	Not applicable	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**

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: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

**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 It is not a skin sensitizer (OECD 442B 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 Skin : Prolonged exposure may cause skin irritation Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea Inhalation : Not an expected route of exposure Over exposure may cause respiratory irritation. .

**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	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	-	500: 24 h Daphnia magna mg/L EC50

Revision Date: 22-Jul-2020

Issuing Date: 15-Oct-2015

Revision Number: 11

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C, LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C, LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C, LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

Triethylene glycol, monobutyl ether	500: 72 h Desmodemus subspicatus mg/L EC50	2400: 96 h Pimephales promelas mg/L LC50 static 2400: 96 h Pimephales promelas mg/L LC50 2200 - 4600: 96 h Leuciscus idus mg/L LC50 static	-	500: 48 h Daphnia magna mg/L EC50
-------------------------------------	--	--	---	-----------------------------------

**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
1,2-Benzisothiazolin-3-one	1.3

**12.4. Mobility in soil**

No information available.

**12.5. Results of 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).

**12.6. 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



Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C,  
LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C,  
LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C,  
LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

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:** 22-Jul-2020

**Issuing Date:** 15-Oct-2015

Revision Number: 11

Product Name: LC3017C, LC3019C, LC3029C, LC3037C, LC3038C, LC3039C,  
LC3117C, LC3119C, LC3129C, LC3137C, LC3139C, LC3159C, LC3217C, LC3219C,  
LC3229C, LC3237C, LC3239C, LC3259C, LC3317C, LC3319C, LC3329C, LC3337C,  
LC3339C, LC3617C, LC3619C, LC3717C, LC3719C, LC3919C

Safety data sheet number: BHC071

## 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** 22-Jul-2020

**Issuing Date** 15-Oct-2015

#### Revision Note

Importer information has been changed.

**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).