

Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

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

## 1.1. Product identifier

Product Name LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK,

LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Product Form Mixture

Safety data sheet number BHK071

#### 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

<u>Manufacturer</u> Brother Industries, Ltd.

15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan

Telephone (for information): +81-52-824-2735

<u>Importer</u> (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

EN / EGHS Page 1 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Safety data sheet number: BHK071

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

## 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.

#### 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	-	65-75	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
Carbon Black	1333-86-4	215-609-9 435-640-3	-	5-9	Not classified	Registered 01-2119384822- 32-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

<sup>\*\*</sup> CONFIDENTIAL

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

EN / EGHS Page 2 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

# Section 4: First aid measures

## 4.1. Description of first aid measures

**General advice** If symptoms persist, call a physician.

**Inhalation** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get immediate medical advice/attention.

Eye contact In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical advice/attention.

**Skin contact:** Wash off immediately with soap and plenty of water. If skin irritation persists, call a

physician.

Ingestion Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of

water to drink.

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

Symptoms Inhalation ( Vapor / Mist ) : No specific effects and/or symptoms have been reported or

known For large quantities: May cause irritation to the respiratory system. Increased

difficulty in 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 ( $CO_2$ ) , Nitrogen oxides ( $NO_x$ ) , Oxides of sulfur

5.3. Advice for firefighters

Special protective equipment for

fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

EN / EGHS Page 3 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

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

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

water drains.

# 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



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

# Section 8: Exposure controls and personal protection

## 8.1. Control parameters

Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
Glycerol	-	TWA: 10 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>
56-81-5		STEL: 30 mg/m <sup>3</sup>			
Carbon Black	-	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>	-
1333-86-4		STEL: 7 mg/m <sup>3</sup>			
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol	-	TWA: 10 mg/m <sup>3</sup>	=	TWA: 20 mg/m <sup>3</sup>	-
56-81-5					
Carbon Black	-	TWA: 3.5 mg/m <sup>3</sup>	-	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>
1333-86-4				STEL: 7 mg/m <sup>3</sup>	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol	-	TWA: 50 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5		STEL: 100 mg/m <sup>3</sup>			STEL: 30 mg/m <sup>3</sup>
Carbon Black	-	-	TWA: 4.0 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>
1333-86-4				STEL: 7 mg/m <sup>3</sup>	STEL: 15 mg/m <sup>3</sup>

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

Predicted No Effect Concentration No information available.

(PNEC)

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** 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

EN / EGHS Page 5 / 11

# brother at your side

# SAFETY DATA SHEET

Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Safety data sheet number: BHK071

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

**Appearance** 

Physical state Liquid Color black
Odor Slight

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Flash point >= 93.3 °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

No data available

None known,
None known

Upper flammability limit:No data availableLower flammability limit:No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative density1.0 - 1.1(H2O=1)

Water solubilitySoluble in waterSolubility(ies)No data availableNone knownPartition coefficientNo data availableNone knownAutoignition temperature> 400 °C

 Decomposition temperature
 No data available
 None known

 Kinematic viscosity
 No data available
 None known

 Dynamic viscosity
 2 5 mPa c

Dynamic viscosity2 - 5 mPa sExplosive propertiesNo information availableOxidizing propertiesNo 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.

EN / EGHS Page 6 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Safety data sheet number: BHK071

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

#### 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 (NOx), Oxides of sulfur

# Section 11: Toxicological information

#### 11.1. Information on toxicological effects

#### **Product Information**

**Inhalation** No information available

Eye contact No information available

**Skin contact:** No information available

Ingestion Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method)

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

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

Respiratory or skin sensitization Respiratory sensitization : No information available

It is not a skin sensitizer (OECD 429 method)

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

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.

Ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

**Reproductive toxicity** No information available.

EN / EGHS Page 7 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

**STOT - single exposure** No information available.

STOT - repeated exposure No information available

**Aspiration hazard** No information available.

Potential health effects 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	Crustacea
			microorganisms	
Glycerol	-	51 - 57: 96 h	-	500: 24 h Daphnia magna
		Oncorhynchus mykiss		mg/L EC50
		mL/L LC50 static		
Triethylene glycol,	500: 72 h Desmodesmus	2400: 96 h Pimephales	-	500: 48 h Daphnia magna
monobutyl ether	subspicatus mg/L EC50	promelas mg/L LC50		mg/L EC50
	-	static 2400: 96 h		
		Pimephales promelas		
		mg/L LC50 2200 - 4600:		
		96 h Leuciscus idus mg/L		
		LC50 static		
Carbon Black	-	1000:96 h Brachydanio	-	5600: 24 h Daphnia
		rerio mg/L LC50		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** 

Component information						
Chemical name	Partition coefficient					
Glycerol	-1.76					
Triethylene glycol, monobutyl ether	0.51					

EN / EGHS Page 8 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

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
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Marine pollutant	Not applicable
14.6	Special Provisions	None
117	Transport in bulk sees	rding tallet applicable

14.7 Transport in bulk according to Not applicable

Annex II of MARPOL 73/78 and the

**IBC Code** 

# RID

UN/ID no	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated
<b>Environmental hazard</b>	Not applicable
	UN/ID no Proper shipping name Hazard Class Packing group Environmental hazard

14.6 Special Provisions None

## <u>ADR</u>

	<del>-</del>	
14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated

EN / EGHS Page 9 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3617BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Safety data sheet number: BHK071

14.4Packing groupNot regulated14.5Environmental hazardNot applicable

14.6 Special Provisions None

IATA

14.1UN/ID noNot regulated14.2Proper shipping nameNot regulated14.3Hazard ClassNot regulated14.4Packing groupNot regulated14.5Environmental hazardNot 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

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

EN / EGHS Page 10 / 11



Revision Date: 30-Sep-2020 Issuing Date: 26-Sep-2013

Safety data sheet number: BHK071

Revision Number: 11

Product Name: LC3017BK, LC3019BK, LC3029BK, LC3037BK, LC3038BK, LC3039BK, LC3117BK, LC3119BK, LC3129BK, LC3137BK, LC3139BK, LC3159BK, LC3217BK, LC3219BK, LC3229BK, LC3237BK, LC3239BK, LC3259BK, LC3317BK, LC3319BK, LC3329BK, LC3337BK, LC3339BK, LC3619BK, LC3717BK, LC3719BK, LC3919BK

Revision Date 30-Sep-2020

Issuing Date 26-Sep-2013

#### **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).



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

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

#### 1.1. Product identifier

Product Name LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M,

LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M,

LC3619M, LC3717M, LC3719M, LC3919M

Product Form Mixture

Safety data sheet number BHM071

# 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

<u>Importer</u> (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]

EN / EGHS Page 1 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

## 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

<sup>\*\*</sup> 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.

EN / EGHS Page 2 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

**Inhalation** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get immediate medical advice/attention.

**Eye contact** In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical advice/attention.

**Skin contact:** Wash off immediately with soap and plenty of water. If skin irritation persists, call a

physician.

Ingestion Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of

water to drink.

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

Symptoms Inhalation ( Vapor / Mist ): No specific effects and/or symptoms have been reported or

known . For large quantities: May cause irritation to the respiratory system. Increased

difficulty in breathing. Sneezing. Coughing .

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

# 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

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

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

EN / EGHS Page 3 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

## 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	-	TWA: 10 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>
56-81-5		STEL: 30 mg/m <sup>3</sup>		-	
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol	-	TWA: 10 mg/m <sup>3</sup>	-	TWA: 20 mg/m <sup>3</sup>	-
56-81-5		_			

EN / EGHS Page 4 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol	-	TWA: 50 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5		STEL: 100 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 magenta
Odor Slight

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7 - 9
Melting point / freezing point < -5 °C

**Boiling point / boiling range** > 100 °C **Flash point** > 93.3 °C

Flash point > 93.3 °C Tag Closed Cup, Cleveland Open Cup,

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability limit:No data availableLower flammability limit:No data available

Vapor pressure No data available None known

EN / EGHS Page 5 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

Vapor density No data available None known Relative density 1.0 - 1.1  $(H_2O=1)$ None known Water solubility Soluble in water Solubility(ies) No data available None known Partition coefficient No data available None known > 400 °C **Autoignition temperature** No data available **Decomposition temperature** None known Kinematic viscosity No data available None known **Dynamic viscosity** 2 - 5 mPas

**Explosive properties**Oxidizing properties
No information available
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 (CO2), Nitrogen oxides (NOx), Oxides of sulfur

# Section 11: Toxicological information

#### 11.1. Information on toxicological effects

## **Product Information**

EN / EGHS Page 6 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

Inhalation No information available

Eye contact No information available

**Skin contact:** No information available

Ingestion Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method)

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

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

**Respiratory or skin sensitization** Respiratory sensitization : No information available

It is not a skin sensitizer (OECD 442B method)

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

Carcinogenicity Ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available

**Aspiration hazard** No information available.

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

EN / EGHS Page 7 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHM071

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

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

## 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

#### MDG

14.1 UN/ID no Not regulated14.2 Proper shipping name Not regulated

EN / EGHS Page 8 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

Safety data sheet number: BHM071

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 acc	ording toNot applicable
Anna	VII OF MAPPOL 73/78	and the

Annex II of MARPOL 73/78 and the

**IBC Code** 

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	<b>Environmental hazard</b>	Not applicable
14.6	Special Provisions	None

## <u>IATA</u>

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	<b>Environmental hazard</b>	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.

EN / EGHS Page 9 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Revision Number: 11

Product Name: LC3017M, LC3019M, LC3029M, LC3037M, LC3038M, LC3039M, LC3117M, LC3119M, LC3129M, LC3137M, LC3139M, LC3159M, LC3217M, LC3219M, LC3229M, LC3237M, LC3239M, LC3259M, LC3317M, LC3319M, LC3329M, LC3337M, LC3339M, LC3617M, LC3619M, LC3717M, LC3719M, LC3919M

Safety data sheet number: BHM071

# 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 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).

EN / EGHS Page 10 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

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

#### 1.1. Product identifier

Product Name LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y,

LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y,

LC3619Y, LC3717Y, LC3719Y, LC3919Y

Product Form Mixture

Safety data sheet number BHY071

# 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

<u>Importer</u> (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]

EN / EGHS Page 1 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

# 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	-	20-30	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

<sup>\*\*</sup> 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.

EN / EGHS Page 2 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

**Inhalation** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get immediate medical advice/attention.

**Eye contact** In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical advice/attention.

**Skin contact:** Wash off immediately with soap and plenty of water. If skin irritation persists, call a

physician.

Ingestion Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of

water to drink.

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

Symptoms Inhalation (Vapor / Mist): No specific effects and/or symptoms have been reported or

known . For large quantities: May cause irritation to the respiratory system. Increased

difficulty in 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 ( $CO_2$ ) , 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

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

EN / EGHS Page 3 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

## 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	-	TWA: 10 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>
56-81-5		STEL: 30 mg/m <sup>3</sup>		-	
01	14 1			i	
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol	Italy -	TWA: 10 mg/m <sup>3</sup>	Netherlands -	TWA: 20 mg/m <sup>3</sup>	Denmark -

EN / EGHS Page 4 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Page 5 / 10

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

\_\_\_\_\_

Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol	-	TWA: 50 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5		STEL: 100 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** 

EN / EGHS

Physical state Liquid
Color dark yellow
Odor Slight

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7 - 9
Melting point / freezing point < -5 °C

**Boiling point / boiling range** > 100 °C **Flash point** > 93.3 °C

Flash point > 93.3 °C Tag Closed Cup, Cleveland Open Cup,

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability limit:No data availableLower flammability limit:No data available

Vapor pressureNo data availableNone known



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

None known

None known

None known

None known

None known

 $(H_2O=1)$ 

Vapor density No data available Relative density 1.0 - 1.1 Water solubility Soluble in water Solubility(ies) No data available Partition coefficient No data available > 400 °C **Autoignition temperature** No data available **Decomposition temperature** Kinematic viscosity No data available **Dynamic viscosity** 2 - 5 mPas

Dynamic viscosity2 - 5 mPa sExplosive propertiesNo information availableOxidizing propertiesNo 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 (CO2), Nitrogen oxides (NOx), Oxides of sulfur

# Section 11: Toxicological information

#### 11.1. Information on toxicological effects

## **Product Information**

EN / EGHS Page 6 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

Inhalation No information available

Eye contact No information available

**Skin contact:** No information available

Ingestion Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method)

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

Serious eye damage/eye irritation Minimal irritant to the eye (OECD 405 method)

Respiratory or skin sensitization Respiratory sensitization : No information available

It is not a skin sensitizer (OECD 442B method)

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

Carcinogenicity Ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure**No information available

**Aspiration hazard** No information available.

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

EN / EGHS Page 7 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHY071

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

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

## 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

#### MDG

14.1 UN/ID no Not regulated14.2 Proper shipping name Not regulated

EN / EGHS Page 8 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

Safety data sheet number: BHY071

14.3	Hazard Class	Not regulated			
14.4	Packing group	Not regulated			
14.5	Marine pollutant	Not applicable			
14.6	Special Provisions	None			
<b>14.7</b> Transport in bulk according to Not applicable					
Anney II of MADDOL 72/70 and the					

Annex II of MARPOL 73/78 and the

**IBC Code** 

DI	ח
ΚI	ט

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
446	Charles Draviniana	Nana

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	<b>Environmental hazard</b>	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	<b>Environmental hazard</b>	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.

EN / EGHS Page 9 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Revision Number: 11

Product Name: LC3017Y, LC3019Y, LC3029Y, LC3037Y, LC3038Y, LC3039Y, LC3117Y, LC3119Y, LC3129Y, LC3137Y, LC3139Y, LC3159Y, LC3217Y, LC3219Y, LC3229Y, LC3237Y, LC3239Y, LC3259Y, LC3317Y, LC3319Y, LC3329Y, LC3337Y, LC3339Y, LC3617Y, LC3717Y, LC3719Y, LC3919Y

Safety data sheet number: BHY071

# 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 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).

EN / EGHS Page 10 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

# 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

<u>Importer</u> (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]

EN / EGHS Page 1 / 10



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

# 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

<sup>\*\*</sup> CONFIDENTIAL

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

# Section 4: First aid measures

# 4.1. Description of first aid measures

EN / EGHS Page 2 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

**General advice** If symptoms persist, call a physician.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get immediate medical advice/attention.

**Eye contact** In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes.

Get immediate medical advice/attention.

**Skin contact:** Wash off immediately with soap and plenty of water. If skin irritation persists, call a

physician.

Ingestion Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of

water to drink.

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

Symptoms Inhalation ( Vapor / Mist ): No specific effects and/or symptoms have been reported or

known . For large quantities: May cause irritation to the respiratory system. Increased

difficulty in breathing. Sneezing. Coughing .

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

# 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  $(CO_2)$  , Nitrogen oxides  $(NO_3)$  , 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

EN / EGHS Page 3 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

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

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	-	TWA: 10 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>
56-81-5		STEL: 30 mg/m <sup>3</sup>			

EN / EGHS Page 4 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol	-	TWA: 10 mg/m <sup>3</sup>	=	TWA: 20 mg/m <sup>3</sup>	=
56-81-5					
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol	-	TWA: 50 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
56-81-5		STEL: 100 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** Remarks • Method **Values** 

- 9 Melting point / freezing point -5 °C < Boiling point / boiling range 100 °C

Flash point 93.3 °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

EN / EGHS Page 5 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

None known

None known

None known

None known

None known

None known

 $(H_2O=1)$ 

Upper flammability limit:

Lower flammability limit:

Vapor pressure

Vapor density

No data available

No data available

No data available

Relative density

No data available

Partition coefficient

1.0 - 1.1

Soluble in water

No data available

No data available

Autoignition temperature > 400 °C

Decomposition temperature
Kinematic viscosity
Not applicable
No data available
Dynamic viscosity
2 - 5 mPa s

Explosive properties

Oxidizing properties

No information available
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 (NOx), Oxides of sulfur

# Section 11: Toxicological information

# 11.1. Information on toxicological effects

EN / EGHS Page 6 / 10



Revision Date: 22-Jul-2020 Issuing Date: 15-Oct-2015

Safety data sheet number: BHC071

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

## **Product Information**

**Inhalation** No information available

Eye contact No information available

**Skin contact:** No information available

Ingestion Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method)

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

Serious eye damage/eye irritation Minimal irritant to the eye (OECD 405 method)

Respiratory or skin sensitization Respiratory sensitization : No information available

It is not a skin sensitizer (OECD 442B method)

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

Carcinogenicity Ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

**Reproductive toxicity**No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available.

Potential health effects 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

Che	emical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
				microorganisms	
	Glycerol	-	51 - 57: 96 h	-	500: 24 h Daphnia magna
	-		Oncorhynchus mykiss		mg/L EC50
			mL/L LC50 static		

EN / EGHS Page 7 / 10



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 Desmodesmus subspicatus mg/L EC50	2400: 96 h Pimephales promelas mg/L LC50	-	500: 48 h Daphnia magna mg/L EC50
		static 2400: 96 h		
		Pimephales promelas		
		mg/L LC50 2200 - 4600:		
		96 h Leuciscus idus mg/L		
		LC50 static		

## 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

#### MDG

14.1 UN/ID no Not regulated14.2 Proper shipping name Not regulated

EN / EGHS Page 8 / 10



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

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 Not applicable

Annex II of MARPOL 73/78 and the

**IBC Code** 

DI	$\mathbf{r}$
NI	$\boldsymbol{\nu}$

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
446	Charles Draviniana	Nana

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	<b>Environmental hazard</b>	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	<b>Environmental hazard</b>	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.

EN / EGHS Page 9 / 10



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) STEL STEL (Short Term Exposure Limit)

Ceiling Ceiling Limit Value \*\* 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).

EN / EGHS Page 10 / 10