

Product Name: LC201BK, LC203BK, LC207BK, LC209BK, LC211BK, LC213BK, LC217BK, LC219BK, LC221BK, LC223BK, LC227XLBK, LC229XLBK, LC231BK, LC233BK, LC237XLBK, LC239XLBK, LC261BK, LC263BK, LC609BK, LC629BK, LC639BK, LC649BK, LC663BK, LC667XLBK, LC669XLBK, LC673BK, LC677XLBK, LC679XLBK, LC683BK, LC687XLBK, LC689XLBK, LC691BK, LC693BK, LC697XLBK, LC699XLBK, LC20EBK, LC21EBK, LC22EBK, LC22UBK, LC23EBK

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Safety data sheet number: BHK026

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

1.1. Product identifier

Product Name	LC201BK, LC203BK, LC207BK, LC209BK, LC211BK, LC213BK, LC217BK, LC219BK, LC221BK, LC223BK, LC227XLBK, LC29XLBK, LC231BK, LC233BK, LC237XLBK, LC239XLBK, LC261BK, LC263BK, LC609BK, LC629BK, LC639BK, LC649BK, LC663BK, LC667XLBK, LC669XLBK, LC673BK, LC677XLBK, LC679XLBK, LC683BK, LC687XLBK, LC689XLBK, LC691BK, LC693BK, LC697XLBK, LC699XLBK, LC20EBK, LC21EBK, LC22EBK, LC22UBK, LC23EBK	
Product Form	Mixture	
Safety data sheet number	BHK026	
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 sa	ifety 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	
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 con	ntact	
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	



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Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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

2.2. Label elements

Regulation (EC) No 1272/2008

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

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

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	-	5-15	Not classified	Not applicable
Diethylene glycol	111-46-6	203-872-2	603-140-00-6	5-9	Acute Tox. 4 (H302)	01-2119457857- 21-XXXX
Carbon Black	1333-86-4	215-609-9	-	5-9	Not classified	01-2119384822- 32-XXXX
1,2-Benzisothiazolin-3-one	2634-33-5	220-120-9	613-088-00-6	<0.05	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)	Not applicable

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

Section 4: First aid measures

4.1. Description of first aid measures

General advice	If symptoms persist, call a physician.	
Inhalation	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 ₂ , water spray or regular foam	
Unsuitable extinguishing media	None	
5.2. Special hazards arising from the substance or mixture		
Specific hazards arising from the	Thermal decomposition can lead to release of irritating and toxic gases and vapors .	

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), Oxides of sulfur

chemical



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5.3. Advice for firefighters

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

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.	
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 handlingAvoid contact with skin, eyes or clothing.Advice on safe handlingAvoid contact with skin, eyes or clothing.General hygiene considerationsHandle in accordance with good industrial hygiene and safety practice.7.2. Conditions for safe storage, in::Uding any incompatibilitiesStorage ConditionsStorage ConditionsKeep out of the reach of children. Keep cool. Protect from sunlight.7.3. Specific end use(s)Water based ink for inkjet printing machine



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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 ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 200 mg/m ³
56-81-5		STEL: 30 mg/m ³			
Diethylene glycol	-	TWA: 23 ppm	-	-	TWA: 10 ppm
111-46-6		TWA: 101 mg/m ³			TWA: 44 mg/m ³
		STEL: 69 ppm			
		STEL: 303 mg/m ³			
Carbon Black	-	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	-
1333-86-4		STEL: 7 mg/m ³			
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol	-	TWA: 10 mg/m ³	-	TWA: 20 mg/m ³	-
56-81-5					
Diethylene glycol	-	-	-	-	TWA: 2.5 ppm
111-46-6					TWA: 11 mg/m ³
Carbon Black	-	TWA: 3.5 mg/m ³	-	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³
1333-86-4				STEL: 7 mg/m ³	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol	-	TWA: 50 mg/m ³	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³
56-81-5		STEL: 100 mg/m ³	-		STEL: 30 mg/m ³
Diethylene glycol	TWA: 10 ppm	TWA: 10 ppm	TWA: 10 mg/m ³	-	TWA: 23 ppm
111-46-6	TWA: 44 mg/m ³	TWA: 44 mg/m ³	-		TWA: 100 mg/m ³
	STEL 40 ppm	STEL: 40 ppm			STEL: 69 ppm
	STEL 176 mg/m ³	STEL: 176 mg/m ³			STEL: 300 mg/m ³
Carbon Black	-	-	TWA: 4.0 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3 mg/m ³
1333-86-4			-	STEL: 7 mg/m ³	STEL: 15 mg/m ³

Derived No Effect Level (DNEL) No i

No information available.

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

Good general ventilation should be sufficient under normal use.	
Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied:	
Safety goggles.	
Protective gloves.	

8.2 Exposure controls



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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 Color Odor Odor threshold

Property

pН Melting point / freezing point Boiling point / boiling range Flash point **Evaporation rate** Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density **Relative density** Water solubility Solubility(ies) Partition coefficient Autoignition temperature **Decomposition temperature** Kinematic viscosity Dynamic viscosity **Explosive properties Oxidizing properties**

9.2. Other information

No information available

Liquid black Slight No information available Values 7 - 9 < -5 °C > 100 °C 93.3 °C > No data available No data available No data available

No data available No data available No data available 1.0 - 1.1Soluble in water No data available No data available > 400 °C No data available No data available 2 - 5 mPa s No information available No information available

Remarks • Method

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

None known None known (H₂O=1)

None known None known

None known None known



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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

Inhalation	No information available
Eye contact	No information available
Skin contact:	No information available
Ingestion	Acute LD ₅₀ > 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 429 method)



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Germ cell mutagenicity	AMES test : Negative (OECD 471 method)		
Carcinogenicity	Carbon Black: In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals, for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors.		
	Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA		
Reproductive toxicity	No information available.		
STOT - single exposure	No information available.		
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		_
Diethylene glycol	-	75200: 96 h Pimephales	EC50 = 29228 mg/L 15	84000: 48 h Daphnia
		promelas mg/L LC50	min	magna mg/L EC50
		flow-through		
Carbon Black	-	-	-	EC50: >5600mg/L (24h,
				Daphnia magna)



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12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

There is no data for this product.

Component Information

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

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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		
14.7 Transport in bulk according toNot applicable Annex II of MARPOL 73/78 and the IBC Code				



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RID

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

Section 15: Regulatory information

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

EU-Regulations

* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.

* Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.

* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

National Regulations

No information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16: Other information

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

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed



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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:TWATWA (time-weighted average)CeilingCeiling Limit Value

STEL

STEL (Short Term Exposure Limit) Trade secret

No information available

Key literature references and sources for data

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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).