

Product name: LC10EY, LC12EY, LC15EY, LC101Y, LC103Y, LC105Y, LC110Y, LC111Y, LC113Y, LC115Y, LC121Y, LC123Y, LC125XLY, LC131Y, LC133Y, LC135XLY, LC161Y, LC163Y, LC505Y, LC525XLY, LC535XLY, LC545XLY, LC563Y, LC565XLY, LC583Y, LC585XLY, LC595XLY Ink

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

1.1 Product identifier

 Product name (code)
 LC10EY(LK9899001), LC12EY(LK9923001), LC15EY(LK9911001), LC101Y(LK7325001), LC103Y(LK6540001), LC105Y(LK6579001), LC110Y(LK7510001), LC111Y(LK7478001), LC113Y(LK6871001), LC115Y(LK6903001), LC121Y(LK7373001), LC123Y(LK6813001), LC125XLY(LK6927001), LC131Y(LK7409001), LC133Y(LK7245001), LC135XLY(LK7212001), LC161Y(LK7655001), LC163Y(LK7659001), LC505Y(LK7728001), LC525XLY(LK7732001), LC535XLY(LK7736001), LC545XLY(LK7741001), LC563Y(LK6973001), LC565XLY(LK6977001), LC583Y(LK7004001), LC585XLY(LK7008001), LC595XLY(LK7020001)

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

Relevant Identified Use(s)	These products are dark yellow ink in a cartridge for Brother Industries, Ltd. inkjet multifunction
	devices and fax receivers. The cartridge should be used as supplied by Brother and for use in the
	products stated. Information provided on this SDS is only consistent with the use specified by
	Brother.

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 (USA)	Brother International Corporation 200 Crossing Boulevard, Bridgewater, NJ 08807, USA Telephone (for information): +1-877-276-8437
Importer (Canada)	Brother International Corporation (Canada) Ltd. 1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada Telephone (for information): +1-514-685-0600
Importer (Europe)	Brother International Europe Ltd. Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK Telephone (for information): +44-161-330-6531
Importer (Australia)	Brother International (Aust.) Pty. Ltd. ACN 001 393 835 Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia Telephone (for information): +61-2-9887-4344
E-mail Address	sds.info@brother.co.jp
1.4 Emergency telephone number	
Emergency Telephone (24 hours)	CHEMTREC +1-703-527-3887 (International) +1-800-424-9300 (North America) +61-290372994 (Australia) For France only: Antipoison Center telephone number: ORFILA +33-1-45-425-959



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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified as hazardous

Classification according to OSHA GHS

Not classified as hazardous

Australia Classification

Not classified as hazardous according to the criteria of NOHSC

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms None

Signal Word None

Hazard Statements

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

Precautionary statements None

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).



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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture: Water based inkjet ink (Mixture).

Chemical Name	CAS-No	EC-No	w/w%	Classification (67/548/EEC)	Classification (EU Reg. 1272/2008)
Glycerol	56-81-5	200-289-5	5-15	Not classified	Not classified
Triethylene glycol monobutyl ether	143-22-6	205-592-6	1-5	Xi; R41	Eye Dam. 1 (H318)
Yellow Dye	*	*	≤5	Not classified	Not classified
Water	7732-18-5	231-791-2	65-80	Not classified	Not classified
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	< 0.05	Xn; R22 Xi; R41 Xi; R38 R43 N; R50	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400

For the full text of R-phrases and H-Statements see Section 16

* Registered

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, obtain medical attention.
Inhalation	Obtain medical attention. In case of accident by inhalation remove casualty to fresh air and keep at rest.
Skin contact	Remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water.
Eye contact	Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.
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	Skin contact: Repeated and/or prolonged skin contact may cause irritation.
	Eye contact: May cause eye irritation.
	Ingestion: Ingestion may cause irritation of the gastrointestinal tract. Unlikely route of exposure.
	Inhalation: Unlikely route of exposure.
4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically.



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SECTION 5: Firefighting measures		
5.1 Extinguishing media Suitable Extinguishing Media	Extinguish preferably with dry chemical, carbon dioxide, water spray, foam.	
Unsuitable Extinguishing Media	None.	
5.2 Special hazards arising from the substance or mixture	Thermal decomposition of organic components may result in occurrence of oxides of carbon. Toxic gases may be formed upon combustion and represents a hazard to firefighters. Combustion products: See Section: 10.	
5.3 Advice for firefighters	Use appropriate respirator for carbon monoxide and carbon dioxide. Wear positive pressure self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and during cleanup in enclosed or poorly ventilated areas immediately after a fire. Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to toxic combustion gases from any source.	

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Avoid contact with eyes.
6.2 Environmental precautions	Prevent substance entering sewers. Washings must be prevented from entering surface water drains.
6.3 Methods and materials for containment and cleaning up	Wipe up with absorbent towel. Wash with water to remove remaining traces of ink.
6.4 Reference to other sections	For personal protection: See section 8. For disposal considerations: See section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling	Keep out of the reach of children. Avoid contact with skin and eyes.
7.2 Conditions for safe storage, including any incompatibilities	Keep away from oxidizing agents.
7.3 Specific end use(s)	These products are dark yellow ink in a cartridge for Brother Industries, Ltd. inkjet multifunction devices and fax receivers. This cartridge should be used as supplied by Brother and for use in the products stated.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical Name	Glycerol 56-81-5
ACGIH TLV	TWA: 10 mg/m ³ mist
OSHA PEL	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction
European Union	-



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The United Kingdom	STEL: 30 mg/m ³
-	TWA: 10 mg/m ³
France	TWA: 10 mg/m ³
Spain	TWA: 10 mg/m ³
Germany	TWA: 50 mg/m ³ Ceiling / Peak: 100 mg/m ³
	Ceiling / Peak: 100 mg/m ³
Portugal	TWA: 10 mg/m ³
Finland	TWA: 20 mg/m ³
Switzerland	STEL: 100 mg/m ³
	TWA: 50 mg/m ³
Poland	TWA: 10 mg/m ³
Ireland	TWA: 10 mg/m ³

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 Protection	Safety goggles.
Hand Protection	Protective gloves.
Skin and body protection	Long sleeved clothing and long pants.
Respiratory protection	Large spillages: Wear suitable respiratory protective equipment.
Environmental Exposure Controls	Avoid release to the environment.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Physical state Color Odor Odor Threshold pH Melting point/freezing point Initial boiling point and boiling range Flash Point

Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties

Liquid Dark yellow Slight No information available 7 - 9 -/<-5 °C > 100 °C Not less than 93.3°C (Tag closed cup; Cleveland open cup) No information available Not applicable No information available No information available No information available 1.0 - 1.1 (H₂O=1) Soluble (water) No information available >400 °C No information available 2 - 5 mPa·s Not explosive No information available

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity	No information available.
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	No information available.
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous decomposition products	Contains: Carbon monoxide (CO). Carbon dioxide (CO $_2$).



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation Eye contact Skin contact Ingestion	No information available. No information available. No information available. LD ₅₀ > 2000 mg/kg (Method: OECD#420)
Skin corrosion/irritation	Non-irritant. (Method: OECD#404)
Serious eye damage/irritation	Minimal irritant to the eye. (Method: OECD#405)
Respiratory or skin sensitisation	It is not a skin sensitizer. (Method: OECD#429)
Mutagenicity	Negative. (Method: OECD#471)
Carcinogenicity	Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA



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SECTION 12: Ecological information

12.1 Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Glycerol		LC ₅₀ : 51 - 57 mL/L 96 h	EC ₅₀ : >500 mg/L 24 h
56-81-5		static (Oncorhynchus mykiss)	(Daphnia magna)
Triethylene glycol monobutyl ether	EC ₅₀ : >500 mg/L 72 h	LC ₅₀ : 2200 - 4600 mg/L 96 h	EC ₅₀ : >500 mg/L 48 h
143-22-6	(Desmodesmus subspicatus)	static (Leuciscus idus)	(Daphnia magna)
		LC ₅₀ : 2400 mg/L 96 h	
		static (Pimephales promelas)	
		LC ₅₀ : 2400 mg/L 96 h	
		(Pimephales promelas)	

12.2 Persistance and degradability

No information available.

12.3 Bioaccumulative potential

Chemical Name		log Pow
Glyce	rol	-1.76
Triethylene glycol monobutyl ether		0.51
40.4 Mahiliku in anil	No information quailable	

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 of in accordance with Federal, State, and local regulations.

SECTION 14: Transport information

Not classified according to the United Nations "Recommendations on the Transport of Dangerous Goods"

14.1 UN Number	None
14.2 UN proper shipping name	None
14.3 Transport hazard class(es)	None
14.4 Packing Group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code	Not applicable

Not regulated under DOT, IMDG, IATA.



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SECTION 15: Regulatory information

	EU: Not classified as dangerous for supply/use. (1999/45/EC) USA: All chemical substances contained in this product are and had been listed on the TSCA Chemical Substances Inventory, and none is subject to any of the following TSCA requirements: section 4 test rules; proposed or final section 5(a)(2) significant new use rules; section 5(e) consent orders; section 8(a) preliminary assessment information rules; and section 8(d) health and safety data reporting rules. Canada: WHMIS: Not applicable. (Manufactured article)
15.2 Chemical Safety Assessment	No.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3	R22 - Harmful if swallowed R41 - Risk of serious damage to eyes R38 - Irritating to skin R43 - May cause sensitization by skin contact R50 - Very toxic to aquatic organisms
Full text of H-Statements referred to under sections 2 and 3	H302 - Harmful if swallowed H315 - Causes skin irritation H318 - Causes serious eye damage H317 - May cause an allergic skin reaction H400 - Very toxic to aquatic life
Additional information	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 Note	SECTION 1, 2.
References:	U.S. 29CFR Part 1910 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization EU Directive 91/322/EEC and 2000/39/EC NTP 11th Report on Carcinogens
Abbreviations:	ACGIH: American Conference of Governmental Industrial Hygienists DOT: Department Of Transportation (US) IARC: International Agency for Research on Cancer IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods NOHSC: National Occupational Health and Safety Commission (Australia) NTP: National Toxicology Program (US) OSHA: Occupational Safety and Health Administration (US) PEL: Permiss ble Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value (ACGIH) TSCA: Toxic Substances Control Act (US) TWA: Time Weighted Average WHMIS: Workplace Hazardous Material Information System (Canada)