

Revision Date: 15-Jun-2020 Issuing Date: 12-Apr-2010

Revision Number: 7

Product Name: LC12M, LC17M, LC40M, LC71M, LC73M, LC75M, LC77XLM, LC79M,

LC400M, LC450XLM, LC1220M, LC1240M, LC1280XLM Ink

Safety data sheet number: BHM021-01

1. Identification

Product identifier

LC12M, LC17M, LC40M, LC71M, LC73M, LC75M, LC77XLM, LC79M, LC400M, **Product Name**

LC450XLM, LC1220M, LC1240M, LC1280XLM Ink

Other means of identification

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Recommended use of the chemical and restrictions on use

Recommended Use These products are dark red ink in a cartridge for Brother Industries, Ltd. inkjet multifunction

> devices and fax receivers. The cartridge should be used as supplied by Brother and for use in the products stated. Information provided on this SDS is only consistent with the use

specified by Brother.

Uses advised against No information available

Details of manufacturer or importer

Manufacturer

Brother Industries, Ltd.

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

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

Importer

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

For further information, please contact

Contact Point Product Safety Department

E-mail address sds.info@brother.co.jp

Emergency telephone number

Emergency telephone number No information available

2. Hazard(s) identification

GHS Classification

Not classified



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Label elements

Not classified

Hazard statements

Not classified

Other hazards which do not result in classification

General Hazards This product contains no substance considered to be persistent, bioaccumulating nor toxic

This product contains no substance considered to be very persistent nor very

bioaccumulating (vPvB).

3. Composition/information on ingredients

Substance

Not applicable

<u>Mixture</u>

Chemical name	CAS No	Weight-%
Water	7732-18-5	65-80
Glycerol	56-81-5	10-20
Magenta Dye	**	<2.5
1,2-Benzisothiazolin-3-one	2634-33-5	<0.05

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4. First-aid measures

Description of first aid measures

General advice If symptoms persist, call a physician.

Emergency telephone number Poisons Information Center, Australia: 13 11 26

Poisons Information Center, New Zealand: 0800 764 766

Inhalation Get immediate medical advice/attention. IF INHALED: Remove to fresh air and keep at rest

in a position comfortable for breathing.

Eye contact Get immediate medical advice/attention. In case of eye contact, immediately flush eyes with

plenty of water for at least 15 minutes.

Skin contact: Take off contaminated clothing. Wash off immediately with soap and plenty of water.

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

water to drink.

Most important symptoms and effects, both acute and delayed

Symptoms Skin contact: Repeated and/or prolonged skin contact may cause irritation

Eye contact: May cause eye irritation

Ingestion: May cause stomach ache. Unlikely route of exposure

Inhalation: Unlikely route of exposure

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO₂, water spray or regular foam

Unsuitable extinguishing media None.

Specific hazards arising from the

chemical

Ingestion

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.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

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

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with eyes.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

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

water drains.

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Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Wipe up with absorbent towel Wash with water to remove remaining traces of ink.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Keep out of the reach of children. Avoid contact with skin and eyes.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from oxidizing agents

Incompatible materials Strong oxidizing agents

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	Australia	ACGIH TLV
Glycerol	10 mg/m ³	
56-81-5		

Appropriate engineering controls

Engineering controlsGood general ventilation should be sufficient under normal use.

Individual protection measures, such as personal protective equipment

Eye/face protection If there is a risk of contact:. Safety goggles.

Skin and body protection If there is a risk of contact:. Long sleeved clothing and long pants.

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Hand protection If there is a risk of contact:. Protective gloves.

Respiratory protection In case of large spillages: Wear suitable respiratory protective equipment.

Environmental exposure controls Avoid release to the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Colordark redOdorSlight.

Odor threshold No information available

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

Flash point > 94 °C Tag Closed Cup Cleveland Open Cup

None known

None known

None known

Evaporation rate No data available None known

Flammability (solid, gas) Not applicable

Flammability Limit in Air
Upper flammability limit:

No data available

Lower flammability limit: No data available

No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative density1.0 - 1.1 $(H_2O=1)$

Water solubility
Soluble in water
Solubility(ies)
Soluble in water
No data available

Partition coefficient No data available None known Autoignition temperature > 400 °C

Decomposition temperatureNo data availableKinematic viscosityNo data available

Dynamic viscosity

2 - 5 mPa s

Explosive properties

Not explosive

Oxidizing properties No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Liquid Density
Bulk density
No information available
No information available
No information available
No information available

10. Stability and reactivity

Reactivity

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Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions No information available.

Conditions to avoid

Conditions to avoidNo information available.

Incompatible materials

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO₂).

11. Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation No information available

Eye contact No information available

Skin contact: No information available

Ingestion Acute LD₅₀ > 2000 mg/kg (OECD 420 method)

Symptoms No information available.

Numerical measures of toxicity - Product Information

No information available



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The following values are calculated based on chapter 3.1 of the GHS document

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ATEmix (dermal) 52,684.20 mg/kg

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Unknown acute toxicity

21 % of the mixture consists of ingredient(s) of unknown toxicity

- 2 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 2 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	
Water	> 90 mL/kg (Rat)	-	-	
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h	
1,2-Benzisothiazolin-3-one	= 1020 mg/kg (Rat)	-	-	

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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 It is not a skin sensitizer (OECD 429 method)

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

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

monographs, NTP and OSHA

12. Ecological information

Ecotoxicity

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic Unknown aquatic toxicity

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		-

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Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	
Glycerol	-1.76	
1.2-Benzisothiazolin-3-one	1.3	

Mobility

Mobility in soil No information available.

Other adverse effects

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose in accordance with federal, state and local regulations.

14. Transport information

ADG Not regulated

IATA Not regulated

<u>IMD</u>G Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory information

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

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National Regulations

<u>Australia</u>

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

International Inventories

TSCA Contact supplier for inventory compliance status **DSL/NDSL** Contact supplier for inventory compliance status **EINECS/ELINCS** Contact supplier for inventory compliance status Contact supplier for inventory compliance status **ENCS** Contact supplier for inventory compliance status **IECSC KECL** Contact supplier for inventory compliance status **PICCS** Contact supplier for inventory compliance status **AICS** Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. Other information

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Revision Note

The symbol (*) in the margin of this SDS indicates that this line has been revised.

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

Legend SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

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Ceiling Maximum limit value ** Trade secret

C Carcinogen

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Disclaimer

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End of Safety Data Sheet