

Product Name  
LC103M, LC105M, LC113M, LC115M, LC123M, LC125XLM, LC133M,  
LC135XLM, LC563M, LC565M, LC573M, LC575XLM, LC583M, LC585M,  
LC593M, LC595XLM Ink

Date: Issued: 26 October 2011  
Revised: 26 September 2012  
Version Number: 4  
SDS No.: BHM023-01-EUUSOTHER

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

|               |           |           |           |           |
|---------------|-----------|-----------|-----------|-----------|
| Product Name: | LC103M    | LC105M    | LC113M    | LC115M    |
| Product Code: | LK6539001 | LK6578001 | LK6870001 | LK6902001 |
| Product Name: | LC123M    | LC125XLM  | LC133M    | LC135XLM  |
| Product Code: | LK6812001 | LK6926001 | LK7244001 | LK7211001 |
| Product Name: | LC563M    | LC565M    | LC573M    | LC575XLM  |
| Product Code: | LK6972001 | LK6976001 | LK6984001 | LK6988001 |
| Product Name: | LC583M    | LC585M    | LC593M    | LC595XLM  |
| Product Code: | LK7003001 | LK7007001 | LK7015001 | LK7019001 |

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

Identified use(s):  
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.

**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  
100 Somerset Corporate Boulevard, Bridgewater, NJ 08807-0911, USA  
Telephone (for information): +1-800-284-4329

**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 (competent person):**  
[sds.info@brother.co.jp](mailto:sds.info@brother.co.jp)

**1.4 Emergency telephone number**  
Emergency Phone No. (24 hours)  
CHEMTREC  
+1-703-527-3887 (International)  
+1-800-424-9300 (North America)  
For France only:  
Antipoison Centre telephone number: ORFILA +33-1-45-425-959

**SECTION 2: HAZARDS IDENTIFICATION**

|   |   |
|---|---|
| <b>2.1 Classification of the substance or mixture</b> | Not classified as hazardous according to EU Directive 1999/45/EC. |
| <b>EU Classification:</b>                             |   |
| <b>Australia Classification:</b>                      | Not classified as hazardous according to the criteria of NOHSC.   |
| <b>2.2 Label elements</b>                             | Label elements according to EU Directive 1999/45EC.: None         |
| <b>2.3 Other hazards</b>                              | None  |

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixtures**

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| Chemical Name | CAS No.    | EC No.     | %W/W    | EU Hazard Symbols | EU Risk Phrases |
|---------------|------------|------------|---------|-------------------|-----------------|
| Glycerol      | 56-81-5    | 200-289-5  | 10 - 20 | -                 | -               |
| Magenta Dye   | Registered | Registered | < 2.5   | N                 | R51/53          |
| Water         | 7732-18-5  | 231-791-2  | 65 - 80 | -                 | -               |

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

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 200-300 ml (half a pint) of water to drink.

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

If symptoms persist, obtain medical attention.

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

Treat symptomatically.

**SECTION 5: FIRE-FIGHTING MEASURES**

**5.1 Extinguishing media**

Suitable Extinguishing Media: Extinguish preferably with dry chemical, Carbon dioxide, Water, 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 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 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**

In case of ink vapor formation, use respirator.

**6.2 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**

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

**6.4 Reference to other sections**

See Section: 13.

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**SECTION 7: HANDLING AND STORAGE**

- 7.1 Precautions for safe handling** Keep out of the reach of children. Avoid contact with skin. Avoid contact with eyes.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep out of the reach of children. Keep away from oxidizing agents.
- 7.3 Specific end use(s)** 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.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Occupational Exposure Limits:**

| Substance | CAS No. | OSHA PEL                          | ACGIH TLV                   | EU IOELV        |
|-----------|---------|-----------------------------------|-----------------------------|-----------------|
| Glycerol  | 56-81-5 | 15 mg/m <sup>3</sup> (total dust) | 10 mg/m <sup>3</sup> (mist) | Not established |

- 8.2 Exposure controls** Observe local regulations.
- Appropriate engineering controls** Good general ventilation should be sufficient under normal use.
- Personal Protection** 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** Goggles.
- Skin protection** Protective gloves.
- Respiratory protection** Large spillages: Wear suitable respiratory protective equipment.
- Other:** Not applicable.
- Environmental Exposure Controls** Not normally required.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

|   |   |
|---|---|
| Appearance (20 °C)                            | Liquid.   |
| Color.  | Dark red.   |
| Odor  | Slight.   |
| Odor threshold (ppm)                          | No data.  |
| pH (Value)                                    | 7 - 9   |
| Melting point (°C) / Freezing point (°C)      | No data / < -5  |
| Boiling point/boiling range (°C):             | >100  |
| Flash point (°C)                              | Not less than 93.3°C<br>(Tag closed cup & Cleveland open cup) |
| Relative Evaporation Rate (Butyl acetate = 1) | No data.  |
| Flammability (solid, gas)                     | No data.  |
| Explosive limit ranges                        | No data.  |
| Vapor pressure (Pa)                           | No data.  |
| Vapor density (Air=1)                         | No data.  |
| Density (g/ml)                                | 1.0 - 1.1   |
| Solubility (Water)                            | Soluble.  |
| Solubility (Other)                            | No data.  |
| Partition coefficient (n-Octanol/water)       | No data.  |
| Auto ignition point (°C)                      | > 400   |
| Decomposition temperature (°C)                | No data.  |

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|                              |          |
|------------------------------|----------|
| Viscosity (mPa. s)           | 2 - 5    |
| Explosive properties         | No data. |
| Oxidising properties         | No data. |
| <b>9.2 Other information</b> | None.    |

## SECTION 10: STABILITY AND REACTIVITY

|   |   |
|---|---|
| 10.1 Reactivity                         | Not available.                                |
| 10.2 Chemical stability                 | Stable.                                       |
| 10.3 Possibility of hazardous reactions | Not available.                                |
| 10.4 Conditions to avoid                | None.   |
| 10.5 Incompatible materials             | Strong oxidizing agents.                      |
| 10.6 Hazardous Decomposition Product(s) | Contains: Carbon monoxide and Carbon dioxide. |

## SECTION 11: TOXICOLOGICAL INFORMATION

|   |  |
|---|--|
| 11.1 Information on toxicological effects |  |
| Acute toxicity:                           |  |
| Ingestion:                                | Acute LD <sub>50</sub> > 2000mg/kg (OECD No.420).<br>Unlikely route of exposure. Ingestion may cause irritation of the gastrointestinal tract. |
| Inhalation:                               | Unlikely route of exposure. No data.   |
| Skin Contact:                             | Non-irritant. (OECD No.404)  |
| Eye Contact:                              | Minimal irritant to the eye. (OECD No.405)   |
| Skin corrosion/irritation:                | Repeated and/or prolonged skin contact may cause irritation.   |
| Serious eye damage/irritation:            | May cause eye irritation.  |
| Respiratory or skin sensitization:        | It is not a skin sensitizer. (OECD No.429)   |
| Mutagenicity:                             | Negative. (OECD No.471)  |
| Carcinogenicity:                          | Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA.                                |
| Reproductive toxicity:                    | No data.   |
| STOT-single exposure:                     | No data.   |
| STOT-repeated exposure:                   | No data.   |
| Aspiration hazard:                        | Not applicable.  |
| Potential Health Effects:                 | No data.   |

## SECTION 12: ECOLOGICAL INFORMATION

No data available on the adverse effects of this product on the environment.

|   |          |
|---|----------|
| 12.1 Toxicity                           | No data. |
| 12.2 Persistence and degradability      | No data. |
| 12.3 Bioaccumulative potential          | No data. |
| 12.4 Mobility in soil                   | No data. |
| 12.5 Results of PBT and vPvB assessment | No data. |
| 12.6 Other adverse effects              | No data. |

## SECTION 13: DISPOSAL CONSIDERATIONS

|                              |   |
|------------------------------|---|
| 13.1 Waste treatment methods | Dispose of in compliance 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 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 MARPOL73/78 and the IBC Code | Not applicable. |

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**SECTION 15: REGULATORY INFORMATION**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
EU: Not classified as dangerous for supply/use. (1999/45/EC)  
USA: All components of this product are listed on the TSCA Inventory.  
WHMIS: Not applicable. (Manufactured article)
- 15.2 Chemical Safety Assessment**  
No.

**SECTION 16: OTHER INFORMATION**

**Hazard Symbol:** N: Dangerous for the environment.  
**Risk Phrases:** R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The following sections contain revisions or new statements: Formats, All Sections.

**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).

**References:**  
U.S. 29CFR Part 1910  
ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices  
EU Directive 91/322/EEC and 2000/39/EC  
IARC Monographs on the Evaluation Carcinogenic Risks to Humans  
World Health Organization  
NTP 11<sup>th</sup> Report on Carcinogens

**Abbreviations:**  
ACGIH: American Conference of Governmental Industrial Hygienists  
ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU)  
DOT: Department Of Transportation (US)  
EINECS: European Inventory of Existing Commercial Chemical Substances  
HCS: Hazard Communication Standard (US)  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
IMDG: International Maritime Dangerous Goods  
IOELV: Indicative Occupational Exposure Limit Value  
NOHSC: National Occupational Health and Safety Commission (Australia)  
NTP: National Toxicology Program (US)  
OSHA: Occupational Safety and Health Administration (US)  
PEL: Permissible Exposure Limit  
RID: Regulations concerning the International carriage of goods by Rail (EU)  
TLV: Threshold Limit Value (ACGIH)  
TSCA: Toxic Substances Control Act (US)  
WHMIS: Workplace Hazardous Material Information System (Canada)