

Revision Date: 31-Aug-2018

Issuing Date: 15-Oct-2015

Revision Number: 10

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

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## 1. IDENTIFICATION

### 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

### Other means of identification

**Product Code(s)** BHK071

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** No information available

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

**Manufacturer Address** Brother Industries, Ltd.  
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan  
Telephone (for information): +81-52-824-2735

**Supplier Address** Brother International Corporation  
200 Crossing Boulevard, Bridgewater, NJ 08807, USA  
Telephone (for information): +1-877-276-8437

### Emergency telephone number

**Emergency Telephone** CHEMTREC +1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

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The product contains no substances which at their given concentration, are considered to be hazardous to health.

## Appearance

**Physical state:** Liquid **Odor:** Slight

## Other Information

### Unknown acute toxicity

30 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

30 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

30 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

10 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

Not applicable.

### Mixture

| Chemical name                       | CAS No    | Weight-% | Trade secret |
|-------------------------------------|-----------|----------|--------------|
| Water                               | 7732-18-5 | 60-70    | *            |
| Glycerol                            | 56-81-5   | 15-25    | *            |
| Carbon Black                        | 1333-86-4 | 5-9      | *            |
| Triethylene glycol, monobutyl ether | 143-22-6  | 1-5      | *            |
| 1,2-Benzisothiazolin-3-one          | 2634-33-5 | < 0.05   | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

\*\* Trade secret

## 4. FIRST AID MEASURES

### Description of first aid measures

**Inhalation** Remove to fresh air.

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**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

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

**Symptoms** No information available

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

**Note to physicians** Treat symptomatically.

## **5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical** No information available

### **Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation.

### **Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas

### **Methods and material for containment and cleaning up**

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

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**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

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

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

The information required is contained in this Material Safety Data Sheet

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name             | ACGIH TLV                                             | OSHA PEL                                                                                                                                                                                                                               | NIOSH IDLH                                                                                                                                                |
|---------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Glycerol<br>56-81-5       | No data available                                     | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction | -                                                                                                                                                         |
| Carbon Black<br>1333-86-4 | TWA: 3 mg/m <sup>3</sup> inhalable particulate matter | TWA: 3.5 mg/m <sup>3</sup><br>(vacated) TWA: 3.5 mg/m <sup>3</sup>                                                                                                                                                                     | IDLH: 1750 mg/m <sup>3</sup><br>TWA: 3.5 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup> Carbon black in presence of Polycyclic aromatic hydrocarbons PAH |

### Appropriate engineering controls

**Engineering controls** Good general ventilation should be sufficient under normal use.

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## Individual protection measures, such as personal protective equipment

|                                |                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eye/face protection            | No special protective equipment required.                                                                                                                                |
| Skin and body protection       | No special protective equipment required.                                                                                                                                |
| Respiratory protection         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice.                                                                                                   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Appearance     |                          |
| Physical state | Liquid                   |
| Color          | black                    |
| 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                    | > 94 °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                        |
| Upper flammability limit:      | No data available        |                                   |
| Lower flammability limit:      | No data available        |                                   |
| Vapor pressure                 | No data available        | None known                        |
| Vapor density                  | No data available        | None known                        |
| Relative density               | 1.0 - 1.1                | (H <sub>2</sub> O=1)              |
| Water solubility               | Soluble in water         |                                   |
| Solubility(ies)                | No data available        | None known                        |
| Partition coefficient          | No data available        | None known                        |
| Autoignition temperature       | > 400 °C                 |                                   |
| Decomposition temperature      | No data available        | None known                        |
| Kinematic viscosity            | No data available        | None known                        |
| Dynamic viscosity              | 2 - 5 mPa s              |                                   |
| Explosive properties           | No information available | No information available.         |
| Oxidizing properties           | No information available |                                   |

### Other Information

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |

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|                        |                          |
|------------------------|--------------------------|
| <b>VOC Content (%)</b> | No information available |
| <b>Liquid Density</b>  | No information available |
| <b>Bulk density</b>    | No information available |

## 10. STABILITY AND REACTIVITY

|                                           |                                                         |
|-------------------------------------------|---------------------------------------------------------|
| <b>Reactivity</b>                         | No information available.                               |
| <b>Chemical stability</b>                 | Stable under normal conditions.                         |
| <b>Possibility of hazardous reactions</b> | None under normal processing.                           |
| <b>Conditions to avoid</b>                | None known based on information supplied                |
| <b>Incompatible materials</b>             | None known based on information supplied                |
| <b>Hazardous decomposition products</b>   | Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. |

## 11. TOXICOLOGICAL INFORMATION

### Product Information

|                                          |                                                                         |
|------------------------------------------|-------------------------------------------------------------------------|
| <b>Inhalation</b>                        | No information available                                                |
| <b>Eye contact</b>                       | No information available.                                               |
| <b>Skin contact</b>                      | No information available.                                               |
| <b>Ingestion</b>                         | Not classified<br>Acute LD <sub>50</sub> > 2000 mg/kg (OECD 423 method) |
| <b>Skin corrosion/irritation</b>         | Not classified<br>Non-irritant (OECD 404 method)                        |
| <b>Serious eye damage/irritation</b>     | Not classified<br>Practically non-irritant (OECD 405 method)            |
| <b>Respiratory or skin sensitization</b> | Not classified<br>It is not a skin sensitizer (OECD 442B method)        |
| <b>Germ cell mutagenicity</b>            | AMES test : Negative (OECD 471 method)                                  |

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## 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**

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical name                                      | Algae/aquatic plants                           | Fish                                                                                                                                                         | Toxicity to microorganisms | Crustacea                               |
|----------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------|
| Glycerol<br>56-81-5                                | -                                              | 51 - 57: 96 h<br>Oncorhynchus mykiss<br>mL/L LC50 static                                                                                                     | -                          | 500: 24 h Daphnia magna<br>mg/L EC50    |
| Carbon Black<br>1333-86-4                          | -                                              | -                                                                                                                                                            | -                          | EC50: >5600mg/L (24h,<br>Daphnia magna) |
| Triethylene glycol,<br>monobutyl ether<br>143-22-6 | 500: 72 h Desmodesmus<br>subspicatus mg/L EC50 | 2400: 96 h Pimephales<br>promelas mg/L LC50<br>static 2400: 96 h<br>Pimephales promelas<br>mg/L LC50 2200 - 4600:<br>96 h Leuciscus idus mg/L<br>LC50 static | -                          | 500: 48 h Daphnia magna<br>mg/L EC50    |

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

### Component Information

| Chemical name                                   | Partition coefficient |
|-------------------------------------------------|-----------------------|
| Glycerol<br>56-81-5                             | -1.76                 |
| Triethylene glycol, monobutyl ether<br>143-22-6 | 0.51                  |
| 1,2-Benzisothiazolin-3-one<br>2634-33-5         | 1.3                   |

**Other adverse effects** No information available.

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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from residues/unused products**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**

Do not reuse empty containers.

## 14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

|         |          |
|---------|----------|
| TSCA    | Complies |
| DSL/NDL | Exempt   |
| ENCS    | Complies |
| IECSC   | Complies |
| KECL    | Complies |
| PICCS   | Complies |
| AICS    | Complies |

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## Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- 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

## US Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

|                                   |    |
|-----------------------------------|----|
| Acute health hazard               | No |
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## U.S. State Right-to-Know Regulations

### US State Regulations

| Chemical name                 | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------|------------|---------------|--------------|
| Water<br>7732-18-5            | -          | -             | X            |
| Glycerol<br>56-81-5           | X          | X             | X            |
| Carbon Black<br>1333-86-4     | X          | X             | X            |
| Triethylene glycol, monobutyl | X          | -             | X            |

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|                   |  |  |  |
|-------------------|--|--|--|
| ether<br>143-22-6 |  |  |  |
|-------------------|--|--|--|

## U.S. EPA Label Information

**EPA Pesticide Registration Number** Not applicable

## **16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|                    |                         |                       |                           |                                                      |
|--------------------|-------------------------|-----------------------|---------------------------|------------------------------------------------------|
| <b><u>NFPA</u></b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Instability</b> 0      | <b>Section 9: Physical and chemical properties</b> - |
| <b><u>HMIS</u></b> | <b>Health hazards</b> 0 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X                         |

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**Revision Note** Not applicable.

### 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).

**End of Safety Data Sheet**