

Product Name

LC3011BK PH, LC3013BK PH, LC3111BK PH, LC3211BK PH, LC3213BK PH, LC3311BK PH, LC3313BK PH, LC3511BK PH, LC3513BK PH, LC3033BK, LC3035BK, LC3133BK, LC3135BK, LC3233BK, LC3235XLBK, LC3333BK, LC3335XLBK, LC3011BK BL PH, LC3111BK BL PH, LC3211BK BL PH, LC3311BK BL PH, LC3511BK BL PH, LC3033BK BL, LC3035BK BL, LC3133BK BL, LC3235XLBK BL, LC3333BK BL

First Issue: Jan. 30, 2017

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SDS No.: BH151KCTE3

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

1.1 Product identifier

Product Name:	LC3011BK PH	LC3013BK PH	LC3111BK PH	LC3211BK PH	LC3213BK PH
Product Code:	D00GX7001	D00KTH001	D00H1X001	D00H2R001	D00KTM001
	LC3311BK PH	LC3313BK PH	LC3511BK PH	LC3513BK PH	
	D00PGE001	D00PGA001	D00PGN001	D00PGJ001	
	LC3033BK	LC3035BK	LC3133BK	LC3135BK	LC3233BK
	D00U5G001	D00U5C001	D00XL9001	D00UG7001	D00UHR001
	LC3235XLBK	LC3333BK	LC3335XLBK		
	D00UGB001	D00XMT001	D00XMN001		
	LC3011BK BL PH	LC3111BK BL PH	LC3211BK BL PH	LC3311BK BL PH	LC3511BK BL PH
	D00BWR001	D00HA4001	D00HAH001	D00PMF001	D00PMK001
	LC3033BK BL	LC3035BK BL	LC3133BK BL	LC3235XLBK BL	LC3333BK BL
	D00CLF001	D00CL7001	D00UL6001	D00XBR001	D00XRF001

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

Identified use(s): Water based ink for inkjet printing machine

1.3 Details of the supplier of the safety data sheet

Manufacturer: BROTHER INDUSTRIES, LTD.
5-1, Hamada-cho, Minami-ku, Nagoya 457-0822, JAPAN
Telephone Number for Information : +81-52-824-3445

Importer (Europe): BROTHER INTERNATIONAL EUROPE LTD.
Brother House, 1 Tame Street, Audenshaw, Manchester M34 5JE, UK
Telephone Number for Information : +44-161-330-6531

Importer (USA): BROTHER INTERNATIONAL CORPORATION
100 Somerset Corporate Boulevard, Bridgewater, NJ 08807-0911, USA
Telephone Number for Information : +1-908-704-1700

Importer (Canada): BROTHER INTERNATIONAL CORPORATION (Canada) LTD.
1 rue Hôtel de Ville, Dollard-des-Ormeaux, Québec, H9B 3H6, CANADA
Telephone Number for Information : +1-514-685-0600

Importer (Australia): BROTHER INTERNATIONAL (AUST.) PTY. LTD. ACN 001 393 835
Level 3, Building A, 11 Talavera Road Macquarie Park, N.S.W. 2113, AUSTRALIA
Telephone Number for Information : +61-2-9887-4344
sds.ieink@brother.co.jp

E-Mail (competent person):

1.4 Emergency telephone number

Emergency Phone No. (24 hours) We do not provide 24 hours cover for information contact.
Please telephone to the above office during our business hours.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification :

Physical hazards	
Flammable liquids:	Not classified
Health hazards	
Acute toxicity (oral):	Not classified
Skin corrosion/irritation:	Not classified
Serious eye damage/eye irritation:	Not classified
Skin sensitization:	Not classified

※Others are not applicable or not possible to classify.

Regulation (EC) No. 1272/2008 as amended Not classified

[CLP] :

2.2 Label elements

GHS Label elements None

Regulation (EC) No. 1272/2008 as amended

[CLP] :

Hazard pictograms	None
Signal Word :	None
Hazard Statements :	EUH208 - Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.
Precautionary statements :	None

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2.3 Other hazards None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

CHEMICAL NAME	CAS No.	EC No.	% by weight	Classification (Eu Reg. 1272/2008)
Carbon Black	1333-86-4	215-609-9	5 - 9	Not classified
Glycerol	56-81-5	200-289-5	5 - 15	Not classified
Diethylene glycol	111-46-6	203-872-2	5 - 9	Acute Tox. 4 (H302)
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	< 0.05	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)
Water	7732-18-5	231-791-2	60-70	Not classified

For the full text of any statements see Section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove to fresh air area and obtain medical attention immediately.
Skin Contact: Wash with water and soap. If irritation continues, obtain medical attention.
Eye Contact: Flush immediately with gentle running water for 15 minutes at least. If irritation continues, obtain medical attention.
Ingestion: Rinse mouth with water, give one or two of glasses of water, and obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No harmful effects are expected under normal use. Over exposure to vapor or mist, may cause symptoms such as respiratory irritation, cough, dizziness, headache and nausea.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media: Water, CO₂, Foam, Dry chemical.
Unsuitable Extinguishing Media: None.

5.2 Special hazards arising from the substance or mixture

May produce toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides if burning.

5.3 Advice for fire-fighters

Use self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin and clothing.

6.2 Environmental precautions

Do not release to surface water or ground water.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

See Section: 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Store in a cool and dark place.

7.3 Specific end use(s)

Water based ink for inkjet printing machine

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits:

CHEMICAL NAME	OSHA PEL	ACGIH TLV	EU IOELV
Carbon Black	Limits for air contaminant TWA3.5mg/m ³	TWA 3mg/m ³ Not classifiable as a human carcinogen.	Not established
Glycerol	(as mist) Total dust TWA 15mg/m ³	Not established	Not established

8.2 Exposure controls

Appropriate engineering controls

Use in a ventilated area.

Personal Protection

Eye/face protection

Use protective eyeglasses.

Skin protection

Use rubber apron and rubber boots, if necessary.

Hand protection

Use rubber gloves.

Respiratory protection

Not required under normal use.

Other:

Not applicable.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance (20 °C)	Black liquid
Odor	Slight odor
Odor threshold (ppm)	Not available
pH (Value)	7 – 9
Melting point (°C) / Freezing point (°C)	Melting point(°C) : <-5°C
Boiling point/boiling range (°C)	Boiling point(°C) : >100°C
Flash point (°C)	Does not flash at 93.3°C or lower (Tag closed cup & Cleveland opened cup)
Evaporation rate	Not available
Flammability (solid, gas)	LEL : Not available UEL : Not available
Explosive limit ranges	Not available
Vapor pressure (Pa)	Not available
Vapor density (Air=1)	Not available
Density (g/cm ³)	1.0 – 1.1 g/ml
Solubility (Water)	Soluble
Solubility (Other)	Not available
Partition coefficient (n-Octanol/water)	Not available
Auto ignition point (°C)	>400°C
Decomposition temperature (°C)	Not available
Viscosity (mPa. s)	2 – 5 mPa.s
Explosive properties	Not available
Oxidising properties	Not available
9.2 Other information	Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	None
10.2 Chemical stability	Stable
10.3 Possibility of hazardous reactions	Will not occur
10.4 Conditions to avoid	High-temperature or High-humidity
10.5 Incompatible materials	Acids, Bases, Oxidizing agents, Reducing agents
10.6 Hazardous Decomposition Product(s)	Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity (oral):

LD₅₀ of ink is greater than 2000mg/kg.

Skin corrosion/irritation:

Ink is classified as a NON IRRITANT

Serious eye damage/irritation:

Ink is classified as a MINIMAL IRRITANT.

Respiratory or skin sensitization:

Respiratory sensitization : Not available

Skin sensitization : Non-sensitizer

Mutagenicity:

Ames test : Negative

Carcinogenicity:

Specific data are not available.

Carbon black has been classified by the IARC as group 2B. However, IARC reported that no significant exposure to carbon black is thought to occur during the use of products in which carbon black is bound to other materials, such as printing ink.

Other ingredients of ink have not been classified as carcinogens according to IARC monographs, NTP, and OSHA regulated.

Reproductive toxicity:

Not available

STOT-single exposure:

Not available

STOT-repeated exposure:

Not available

Aspiration hazard:

Not available

Potential Health Effects:

Eye : Ink may cause slight irritation.

Skin : Prolonged exposure to ink may cause irritation.

Ingestion : Ink may cause gastrointestinal or other adverse effects.

Inhalation : Not expected to be a route of exposure under normal use.

Over exposure may cause respiratory irritation.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Not available

12.2 Persistence and degradability

Not available

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil

Not available

12.5 Results of PBT and vPvB assessment

Not available

12.6 Other adverse effects

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose in accordance with federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

None

14.2 Proper Shipping Name

None

14.3 Transport hazard class(es)

None

14.4 Packing Group

None

US Department of Transportation (DOT) :

Not regulated as dangerous goods.

Maritime Transport IMDG :

Not regulated as dangerous goods.

Air Transport ICAO/IATA :

Not regulated as dangerous goods.

14.5 Environmental hazards

Not available

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

SECTION 15: REGULATORY INFORMATION

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

EU : All components in ink comply with REACH rules and regulations.
Ink is not classified according to Regulation (EC) No 1272/2008 and Regulation (EU) No 286/2011.

US : All components in ink comply with TSCA rules and regulations.

Canada : WHMIS : Not applicable. (Manufactured article)

15.2 Chemical Safety Assessment

None

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SECTION 16: OTHER INFORMATION

Issue Date:

Sep. 25, 2017

The following sections contain revisions or new statements

Section 1

Additional information:

The information only relates to this specific product. It may not be valid for this product, 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:

World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risks to Humans, Volume 93
U.S. Department of labor, 29CFR Part 1910.
ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
EU Commission Directive 2009/161/EU

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
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
NTP	National Toxicology Program (US)
OSHA	Occupational Safety and Health Administration (US)
PEL	Permissible Exposure Limit
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals (EU)
TLV	Threshold Limit Value(ACGIH)
TSCA	Toxic Substances Control Act (US)
WHMIS	Workplace Hazardous Material Information System (Canada)

Full text of any statements:

Acute Tox. 4	Acute toxicity Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
Aquatic Acute 1	Hazardous to the aquatic environment -Acute Category 1
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H400	Very toxic to aquatic life