

Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6

SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK,

LC597XLBK, LC599XLBK Ink

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

1.1 Product identifier

Product name (code) LC10EBK(LK9896001), LC12EBK(LK9920001), LC15EBK(LK9908001), LC101BK(LK7322001),

LC103BK(LK6537001), LC107BK(LK6576001), LC109BK(LK7597001), LC110BK(LK7507001),

LC111BK(LK7475001), LC113BK(LK6868001), LC117BK(LK6900001), LC119BK(LK7598001),

1473031

LC121BK\(LK7370001\), LC123BK\(LK6810001\), LC127XL\(\text{B}K\)(LK69240\(\text{0}1\)), LC129XL\(\text{B}K\)(LK7599001\), LC131\(\text{B}K\)(LK7406001\), LC133BK\(LK7242001\), LC137XL\(\text{B}K\)(LK7209001\), LC139XL\(\text{B}K\)(LK7650001\), LC161\(\text{B}K\)(LK7652001\), LC163BK\(LK7656001\), LC509BK\(LK7725001\), LC529XL\(\text{B}K\)(LK7729001\), LC539XL\(\text{B}K\)(LK7733001\), LC549XL\(\text{B}K\)(LK7738001\), LC563BK\(LK6970001\), LC567XL\(\text{B}K\)(LK6974001\), LC569XL\(\text{B}K\)(LK7724001\), LC587XL\(\text{B}K\)(LK7005001\), LC589XL\(\text{B}K\)(LK7724001\), LC597XL\(\text{B}K\)(LK7017001\),

LC599XLBK(LK7737001)

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

Relevant Identified Use(s)

These products are black 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)

For France only:

Antipoison Center telephone number: ORFILA +33-1-45-425-959



Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6
SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC597XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC59XLBK, LC599XLBK, LC59XLBK, LC58XLBK, LC58XLBK, LC58XLBK

### **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 Directive 1999/45/EC

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).



Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6 SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC589X

LC597XLBK, LC599XLBK Ink

### **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
Carbon Black	1333-86-4	215-609-9	1-10	Not classified	Not classified
Diethylene glycol	111-46-6	203-872-2	1-9	Xn; R22	Acute Tox. 4 (H302)
Water	7732-18-5	231-791-2	60-70	Not classified	Not classified
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	< 0.05	Хп; R22 Хі; R41 Хі; 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

### **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 Skin contact: Repeated and/or prolonged skin contact may cause irritation.

effects, both acute and delayed

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.



Issuing Date: 26-October-2011 1-April -2015 Revision Date:

Version: 6 SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK,

LC597XLBK, LC599XLBK Ink

### 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 black 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 58-81-5	
ACGIH TLV	TWA: 10 mg/m <sup>3</sup>	mist



Issuing Date: 26-October-2011 Revision Date: 1-April -2015 Version: 6

SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC597XLBK, LC599XLBK Ink

OSHA PEL	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction
European Union	
The United Kingdom	STEL: 30 mg/m <sup>3</sup>
The same of the sa	TWA: 10 mg/m <sup>3</sup>
France	TWA: 10 mg/m <sup>3</sup>
Spain	TWA: 10 mg/m <sup>3</sup>
Germany	TWA: 50 mg/m <sup>3</sup>
	Ceiling / Peak: 100 mg/m³
Portugal	TWA: 10 mg/m <sup>3</sup>
Finland	TWA: 20 mg/m <sup>3</sup>
Switzerland	STEL: 100 mg/m³
• · · · · · · · · · · · · · · · · · · ·	TWA: 50 mg/m <sup>3</sup>
Poland	TWA: 10 mg/m³
Ireland	TWA: 10 mg/m <sup>3</sup>
Chemical Name	Carbon Black
Chemical Italie	1333-86-4
ACGIH TLV	TWA: 3 mg/m³ inhalable fraction
OSHA PEL	TWA: 3.5 mg/m <sup>3</sup>
European Union	TAAV. 2.5 HIĞILI
The United Kingdom	STEL; 7 mg/m³
The Onited Kingdom	DNA 3 F malm3
E	TWA: 3.5 mg/m <sup>3</sup>
France	TWA: 3.5 mg/m³
Spain	TWA: 3.5 mg/m <sup>3</sup>
Germany	Carc
Portugal	TWA: 3,5 mg/m <sup>3</sup>
Finland	TWA: 3,5 mg/m <sup>3</sup>
	STEL: 7 mg/m <sup>3</sup>
Denmark	TWA: 3.5 mg/m <sup>3</sup>
Poland	TWA: 4.0 mg/m <sup>3</sup>
Norway	TWA: 3.5 mg/m <sup>3</sup>
	STEL: 7 mg/m <sup>3</sup>
Ireland	TWA: 3.5 mg/m <sup>3</sup>
	STEL: 7 mg/m <sup>3</sup>
Chemical Name	Diethylene glycol
	111-46-6
ACGIH TLV	-
OSHA PEL	2
European Union	
The United Kingdom	STEL: 69 ppm
	STEL: 303 mg/m³
	TWA: 23 ppm
	TWA: 101 mg/m <sup>3</sup>
Germany	TWA: 10 ppm
	TWA: 44 mg/m <sup>3</sup>
	Ceiling / Peak: 40 ppm
	Ceiling / Peak: 176 mg/m³
	2 1
Denmark	TWA: 2.5 ppm
	TWA: 11 mg/m³
Austria	STEL 40 ppm
	STEL 176 mg/m <sup>3</sup>
	TWA: 10 ppm
	TWA: 44 mg/m³
Switzerland	STEL: 40 ppm
	STEL: 176 mg/m <sup>3</sup>
	TWA: 10 ppm
Poland	TWA: 44 mg/m³ TWA: 10 mg/m³



Issuing Date: 26-October-2011

Revision Date: 1-April -2015

Version: 6 SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC597XLBK, LC599XLBK Ink

Ireland	TWA: 23 ppm
	TWA: 100 mg/m <sup>3</sup>

#### 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.

# SECTION 9: Physical and chemical properties

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

Appearance

Physical state Liquid Color Black Odor Slight

Odor Threshold No information available

Melting point/freezing point -/<-5 °C > 100 °C Initial boiling point and boiling range Flash Point Not less than 93.3°C

( Tag closed cup; Cleveland open cup )

Evaporation rate No information available Flammability (solid, gas) Not applicable

Upper/lower flammability or explosive No information available

limits

Vapor pressure No information available Vapor density No information available Relative density 1.0 - 1.1 (H<sub>2</sub>O=1) Solubility(ies) Soluble (water) Partition coefficient: n-octanol/water No information available >400 °C Auto-ignition temperature

Decomposition temperature No information available Viscosity 2 - 5 mPa·s

Explosive properties Not explosive Oxidizing properties No information available

#### 9.2 Other information

No information available.



Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6
SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC589X

LC597XLBK, LC599XLBK Ink

### **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<sub>2</sub>).

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Inhalation

No information available. No information available.

Eye contact Skin contact

No information available.

Ingestion

LD<sub>50</sub> > 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

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.



LC597XLBK, LC599XLBK Ink

# SAFETY DATA SHEET

Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6

SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK,

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Glycerol 56-81-5		LC <sub>50</sub> : 51 - 57 mL/L 96 h static (Oncorhynchus mykiss)	EC <sub>50</sub> : >500 mg/L 24 h (Daphnia magna)
Carbon Black 1333-86-4			EC <sub>50</sub> : >5600 mg/L 24 h (Daphnia magna)
Diethylene glycol 111-46-6		LC <sub>50</sub> : 75200 mg/L 96 h flow-through (Pimephales promelas)	EC <sub>50</sub> : 84000 mg/L 48 h (Daphnia magna)

12.2 Persistance and degradability

No information available.

#### 12.3 Bioaccumulative potential

Chemical Name	log Pow	
Glycerol	-1.76	
Diethylene glycol	-1.98	

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.



Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6

SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK, LC597XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC599XLBK, LC597XLBK, LC599XLBK, LC59XLBK, LC59

# **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.

### 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 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.



Issuing Date: 26-October-2011 Revision Date: 1-April -2015

Version: 6

SDS No: BHK023-01-EUUSOTHER

Product name: LC10EBK, LC12EBK, LC15EBK, LC101BK, LC103BK, LC107BK, LC109BK, LC110BK, LC111BK, LC113BK, LC117BK, LC119BK, LC121BK, LC123BK, LC127XLBK, LC129XLBK, LC131BK, LC133BK, LC137XLBK, LC139XLBK, LC161BK, LC163BK, LC509BK, LC529XLBK, LC539XLBK, LC549XLBK, LC563BK, LC567XLBK, LC569XLBK, LC583BK, LC587XLBK, LC589XLBK,

LC597XLBK, LC599XLBK Ink

### **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 T

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, 3.** 

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: Permissible 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)