

### Safety Data Sheet

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### Ink cartridge BK (H086075-00)

SDS Number: SDS H086075-00-02-OT-E--- Effective Date: 06/03/2019

### **1. Product Identification**

Product Name:Ink cartridge BKUse:Ink for inkjet printing

### 2. Hazards Identification

- 2.1. Classification of the substance or mixture
  - EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None Hazard statements:

None

Precautionary statements:

None

**Special Provisions:** 

EUH210 Safety data sheet available on request.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None Other Hazards:

No other hazards

### 3. Composition / Information on Ingredients

#### 3.1. Substances

N.A.

### 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
65% ~80%	Water	CAS: 7732-18-5 EC: 231-791-2	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
7% ~10%	Glycerol	CAS: 56-81-5 EC: 200-289-5	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
5%~7%	2-[2-(2-butoxyethoxy)et hoxy]ethanol; TEGBE; triethylene glycol monobutyl ether	Index number: 603-183-00-0 CAS: 143-22-6 EC: 205-592-6 REACH No.: 01-21194751 07-38	3.3/1 Eye Dam. 1 H318
< 0.05%	1,2-benzisothiazol- 3(2H)-one; 1,2-benzisothiazolin-3- one	Index number:613-088-00-6 CAS: 2634-33-5 EC: 220-120-9	<ul> <li>3.1/4/Oral Acute Tox. 4 H302</li> <li>3.2/2 Skin Irrit. 2 H315</li> <li>3.3/1 Eye Dam. 1 H318</li> <li>3.4.2/1-1A-1B Skin Sens.</li> <li>1,1A,1B H317</li> <li>4.1/A1 Aquatic Acute 1 H400</li> </ul>

### 4. First Aid Measures

- 4.1. Description of first aid measures
  - In case of skin contact:
    - Wash with plenty of water and soap.
  - In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL

EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

- 4.3. Indication of any immediate medical attention and special treatment needed
  - Treatment: None

# 5. Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: Water. Carbon dioxide (CO2). Extinguishing media which must not be used for safety reasons: None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

### 6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

- 6.3. Methods and material for containment and cleaning up
  - Wash with plenty of water.
- 6.4. Reference to other sections

See also section 8 and 13

## 7. Handling and Storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists. Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed. Incompatible materials: None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

### 7.3. Specific end use(s)

None in particular

# 8. Exposure Controls/Personal Protection

#### 8.1. Control parameters Glycerol - CAS: 56-81-5 - OEL Type: OSHA - LTE: 5 mg/m3 - Notes: PEL, as mist, respirable fraction - OEL Type: OSHA - LTE: 15 mg/m3 - Notes: PEL, as mist, total dust **DNEL Exposure Limit Values** N.A. PNEC Exposure Limit Values 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether -CAS: 143-22-6 Target: Fresh Water - Value: 1.5 mg/l Target: Freshwater sediments - Value: 5.77 mg/kg Target: Marine water - Value: 0.15 mg/l Target: Marine water sediments - Value: 0.13 mg/kg Target: Microorganisms in sewage treatments - Value: 200 mg/l 8.2. Exposure controls Eye protection: Not needed for normal use. Anyway, operate according good working practices. Protection for skin: No special precaution must be adopted for normal use. Protection for hands: Not needed for normal use. Respiratory protection: Not needed for normal use. Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

## 9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Black Liquid
Odour:	Slightly
Odour threshold:	N.A.
pH:	$7.4 \sim 8.0$ at $20 \ ^\circ C$
Melting point / freezing point:	-15 °C
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.

Vapour density:	N.A.
Flash point:	Does not flash until 100 °C / 212 ° F
	(closed cup method, ASTM D 3278)
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1.061 at 20 °C
Solubility in water:	Complete
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	$< 5 \text{ mPa} \cdot \text{s}$ at 20 °C
Explosive properties:	N.A.
Oxidizing properties:	N.A.
9.2. Other information	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
-	

# **10. Stability and Reactivity**

- 10.1. Reactivity Stable under normal conditions
- 10.2. Chemical stability
- Stable under normal conditions 10.3. Possibility of hazardous reactions
  - None
- 10.4. Conditions to avoid Stable under normal conditions.
- 10.5. Incompatible materials None in particular.
- 10.6. Hazardous decomposition products None.

## **11. Toxicological Information**

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Glycerol - CAS: 56-81-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 7750 mg/kg - Source: Journal of Industrial Hygiene and Toxicology. Vol. 23, Pg. 259, 1941 Test: LDLo - Route: Oral - Species: Human = 1428 mg/kg - Source: "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969Vol. -, Pg. 288, 1969. - Notes: BEHAVIORAL: HEADACHE GASTROINTESTINAL: NAUSEA OR VOMITING

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Dermal - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962. Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

Substance(s) listed on the IARC Monographs:

None.

If not differently specified, the information required in Regulation (EU) 2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

# **12. Ecological Information**

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. N.A.

12.2. Persistence and degradability

N.A.

- 12.3. Bioaccumulative potential N.A.
- 12.4. Mobility in soil N.A.
- 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects None

# **13. Disposal Considerations**

13.1. Waste treatment methods Recover if possible. In so doing, comply with the local and national regulations currently in force.

# **14. Transport Information**

- 14.1. UN number
  - Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name

N.A.

- 14.3. Transport hazard class(es) N.A.
- 14.4. Packing group N.A.
- 14.5. Environmental hazards N.A.
- 14.6. Special precautions for user N.A.
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N.A.

# **15. Regulatory Information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU Information:

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP) Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: No restriction. Restrictions related to the substances contained: No restriction. Where applicable, refer to the following regulatory provisions : Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments. Regulation (EC) nr 648/2004 (detergents). 1999/13/EC (VOC directive) Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II): N.A.

USA Information:

TSCA - Toxic Substances Control Act

TSCA inventory: all the components are listed on the TSCA inventory. TSCA listed substances:

None.

SARA - Superfund Amendments and Reauthorization Act

Section 302 – Extremely Hazardous Substances: no substances listed.

Section 304 - Hazardous substances: no substances listed.

Section 313 – Toxic chemical list: 2-[2-(2-butoxyethoxy)ethoxy]ethanol;

TEGBE; triethylene glycol monobutyl ether.

CAA - Clean Air Act

CAA listed substances:

Glycerol is listed in CAA Section 111.

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether is listed in CAA Section 112, Section 112(b) - HON.

California Proposition 65

Substance(s) listed under California Proposition 65:

None.

NFPA rating:



HMIS rating:



Canada Information: WHMIS Controlled Product: Not applicable (Manufactured article) Australia Information: Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC New Zealand Information: Hazardous Substances and New Organisms Act 1996: Not regulated 15.2. Chemical safety assessment No

### **16. Other Information**

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of
CAS:	Dangerous Goods by Road. Chemical Abstracts Service (division of the American Chemical
	Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of
	Chemicals.
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport
	Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization"
	(ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.

NFPA:	National Fire Protection Association
NOHSC:	National Occupational Health and Safety Commission
OSHA:	Occupational Safety and Health Administration
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods
	by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day.
	(ACGIH Standard).
WGK:	German Water Hazard Class.
WHMIS:	Workplace Hazardous Materials Information System

#### **Disclaimer:**

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