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# 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier: BLACK INK CARTRIDGE/10B, Text Black Ink

Product code: 3949914 - Text Black Ink

Synonyms: None.

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

1.2.1. Identified uses: ink or inkjet chemical

**1.3. Details of the supplier of the safety data sheet:** KODAK LIMITED, Hemel One, Boundary Way, Hemel Hempstead, HP2 7YU, Great Britain

For further information about this product, telephone 0870-2430270 or email kes@kodak.com.

#### 1.4. Emergency telephone number:

IN EMERGENCY, telephone: 0870-2430270. Available during office hours only.

#### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

# Classification according to EU Directives 67/548/EEC or 1999/45/EC:

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC

## 2.2. Label elements:

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

#### Labelling according to 67/548/EEC or 1999/45/EC:

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.\*

\*Safety data sheet available for professional user on request.

#### 2.3. Other hazards

None known.

# 3. Composition/information on ingredients

Weight percent	Component	CAS-No. EC No. REACH Reg. No.	Classification according to 1272/2008/EC	Classification according to 67/548/EEC
10 - 20	2,2' -oxybisethanol			
	•	111-46-6	Acute Tox. 4 H302	Xn; R22
		203-872-2	*	*
		not available		
1 - 10	glycerol			

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		56-81-5 200-289-5 not available	**	**
0.1 - < 1	Ethane-1,2-diol			
		107-21-1	Acute Tox. 4 H302	Xn; R22
		203-473-3	*	*
		not available		
0.1 - < 1	Carbon black			
		1333-86-4	**	**
		215-609-9		
		not available		
0.1 - < 1	1-methoxypropa	n-2-ol		
	• • •	107-98-2	Flam. Liq. 3 H226	R10, R67
		203-539-1	STOT SE 3 H336	*
		not available	*	

Full text of R- and H-phrases: see Section 16.

# 4. First aid measures

- 4.1. Description of first aid measures
- 4.1.1. Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms occur.
- **4.1.2. Skin:** Immediately flush with plenty of water for at least 15 minutes and wash using soap. Get medical attention if symptoms occur.
- **4.1.3.** Eyes: In case of contact with eyes, flush immediately with plenty of water and seek medical attention.
- **4.1.4. Ingestion:** Do NOT induce vomiting. Give victim a glass of water. Get medical attention immediately. Never give anything by mouth to an unconscious person.
- **4.2. Most important symptoms and effects, both acute and delayed:** No information available.
- **4.3.** Indication of immediate medical attention and special treatment needed: No information available.

# 5. Fire-fighting measures

- **5.1. Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- 5.2. Special hazards arising from the substance or mixture
- **5.2.1.** Hazardous Combustion Products: None., (see also Hazardous Decomposition Products sections.)
- 5.2.2. Unusual Fire and Explosion Hazards: None.
- **5.3.** Advice for firefighters: Wear self-contained breathing apparatus and protective clothing.

#### 6. Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures:** Refer to protective measures listed in sections 7 and 8.

<sup>\*</sup> Substance classification as listed in Annex VI to Regulation (EC) No 1272/2008

<sup>\*\*</sup> Substance not listed in Annex VI to Regulation (EC) No 1272/2008

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- **6.2. Environmental precautions:** Contaminated absorbent should be disposed of in accordance with local regulations.
- **6.3. Methods and materials for containment and cleaning up:** Prevent spillage from entering drains. Absorb spill with vermiculite or other inert absorbant material such as sand or earth, then place in a suitable container for proper disposal. Clean surface thoroughly with water to remove residual contamination.
- **6.4. Reference to other sections:** See Section 8 for recommendations on the use of personal protective equipment.

# 7. Handling and storage

#### 7.1. Precautions for safe handling

- **7.1.1. Personal precautions:** Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.
- **7.1.2. Prevention of Fire and Explosion:** The physical-chemical properties of this material have not been fully investigated. Use only with adequate ventilation. Keep from contact with oxidizing materials.
- **7.1.3. Ventilation:** Match ventilation rates to conditions of use so as not to exceed any applicable exposure limits (see Section 8).
- **7.2. Conditions for safe storage, including any incompatibilities:** Cool conditions (5 30°C). Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)
- **7.3. Specific end uses:** No information available.

# 8. Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1. Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Diethylene glycol	EH40	time weighted average Short term exposure limit	23 ppm 101 mg/m3 69 ppm 303 mg/m3 Remarks: calculated
Glycerol		time weighted average	10 mg/m3 Form of exposure: mist
		Short term exposure limit	30 mg/m3 Form of exposure: mist Remarks: calculated
Diethylene glycol Glycerol	HSA	time weighted average time weighted average	23 ppm 100 mg/m3 10 mg/m3

#### 8.2. Exposure controls

**8.2.1.** Appropriate engineering controls: For use other than intended use (such as in the event of a large spill), proper ventilation may be required.

# 8.2.2. Individual protection measures, such as personal protective equipment

**Eye protection:** None should be needed under normal conditions of use.

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**Hand protection:** None should be needed.

Respiratory protection: None should be needed under normal conditions of use.

General health and safety measures: Safety shower, eye wash, washing facilities as appropriate to

condition of use.

**8.2.3.** Environmental exposure controls: No information available.

# 9. Physical and chemical properties

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

**Appearance** 

Physical state: liquid (Aqueous solution)

Colour: black

Odour: no data available

Odour Threshold: no data available

pH: no data available

Melting point/freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point: > 93.33 °C(> 200.0 °F) (estimated)

Evaporation rate: no data available

Flammability (Solid; gas): no data available

**Upper explosion limit:** no data available

Lower explosion limit: no data available

Vapour pressure: no data available

Vapour density: no data available

Specific gravity: no data available

Volatile fraction by weight: 70 - 75 %

Water solubility: soluble

Partition coefficient: n-octanol/water: no data available

Autoignition temperature: no data available

Decomposition temperature: no data available

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Viscosity: no data available

Explosive properties: no data available

Oxidizing properties: no data available

# 10. Stability and reactivity

10.1. Reactivity: no data available

**10.2. Chemical stability:** Stable under normal conditions.

10.3. Possibility of hazardous reactions: Hazardous polymerisation does not occur.

10.4. Conditions to avoid: no data available

**10.5. Incompatible materials:** Strong oxidizing agents.

10.6. Hazardous decomposition products: Carbon oxides

# 11. Toxicological information

## **Effects of Exposure**

# Toxicokinetics, metabolism and distribution

no data available

### **Acute toxicity**

no data available

# Corrositivity and irritation

no data available

# Sensitisation

no data available

#### **CMR** effects

# Germ cell mutagenicity

No information available.

# Carcinogenicity

No information available.

# Reproductive toxicity

No information available.

# Specific target organ toxicity - single exposure

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No information available.

# Specific target organ toxicity - repeated exposure

No information available.

#### **Aspiration hazard**

No information available.

# Information on likely routes of exposure

**Inhalation:** Expected to be a low hazard for recommended handling.

Eyes: No specific hazard known. May cause transient irritation.

**Skin:** Expected to be a low hazard for recommended handling.

Ingestion: Expected to be a low hazard for recommended handling.

# Data for 2,2' -oxybisethanol (CAS 111-46-6):

# **Acute Toxicity Data:**

Oral LD50 (rat): 12,565 mg/kg

Inhalation LC50 (rat): > 5.08 mg/l / 4 hr OECD Test Guideline 403

Dermal LD50 (rabbit): 11,890 mg/kgSkin irritation: slight to moderate

• Eye irritation: mild

# Mutagenicity/Genotoxicity Data:

Ames test: negative (in presence and absence of activation)

# Data for glycerol (CAS 56-81-5):

# **Acute Toxicity Data:**

Oral LD50 (rat): 17,000 - 27,200 mg/kg

Dermal LD50 (rat): > 21,900 mg/kg
Skin irritation: Mild skin irritation

Eye irritation: mild

# Data for Carbon black (CAS 1333-86-4):

#### **Acute Toxicity Data:**

Oral LD50 (rat): > 5,000 mg/kg

• Skin irritation: No skin irritation

Eye irritation: none

#### Mutagenicity/Genotoxicity Data:

Salmonella typhimurium assay (Ames test) (TA98, TA100, TA1535, TA1537, TA1538): negative (in presence and absence of activation)

• Mouse lymphoma assay: negative (in presence of activation)

#### 12. Ecological information

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The following properties are ESTIMATED from the components of the preparations.

### 12.1. Toxicity

Toxicity to fish (LC50): > 100 mg/l

Toxicity to daphnia (EC50): > 100 mg/l

## 12.2. Persistence and degradability

Persistence and degradability: Readily biodegradable.

# 12.3. Bioaccumulative potential

no data available

#### 12.4. Mobility in soil

No information available.

#### 12.5. Results of PBT and vPvB assessment

No information available.

#### 12.6. Other adverse effects

No information available.

# 13. Disposal considerations

#### 13.1. Waste treatment methods

Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorised waste management companies.

# 14. Transport information

Not regulated for all modes of transportation.

For more transportation information, go to: www.kodak.com/go/ship.

# 15. Regulatory information

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Notification status

Regulatory List	Notification status

TSCA Not all listed
DSL Not all listed
NDSL None listed
EINECS Not all listed

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ELINCS	Listed
NLP	None listed
AICS	Not all listed
IECS	Not all listed
ENCS	Not all listed
ECI	Not all listed
NZIoC	Not all listed
PICCS	Not all listed
TSCA 12(b)	Listed

<sup>&</sup>quot;Not all listed" indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

### 15.2. Chemical safety assessment

Chemical safety assessment has not been performed.

#### 16. Other information

#### 16.1. Indication of changes

Corrected/updated:

VwVwS

composition data

Review Safety Data Sheet before using product.

# 16.2. Key or legend to abbreviations and acronyms used in the safety data sheet

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS = Australian Inventory of Chemical Substances; CAS = Chemical Abstracts Service; CLP = Classification, Labelling, and Packaging; DSL = Canada Domestic Substances List; EC = European Commission; EC50 = Effective Concentration 50%; ECI = Korea Existing Chemicals list; EINECS = European Inventory of Existing Commercial chemical Substances; ELINCS = European List of Notified Chemical Substances; ENCS = Japan Existing and New Chemical Substances; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IC50 = Inhibitory Concentration 50%; IECS = China Inventory of Existing Chemical Substances; IMDG = International Maritime Dangerous Goods; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; mg/Kg = milligrams per Kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; NDSL = Canada Non-Domestic Substances List; NLP = Europe No Longer Polymers; NZIoC = New Zealand Inventory of Chemicals; PBT = Persistent, Bioaccumulative and Toxic substances; PICCS = Philippines Inventory of Chemicals and Chemical Substances; ppm = parts per million; REACH= Registration, Evaluation and Authorization of Chemicals; RID = European Agreement concerning the International Carriage of Dangerous Goods by Rail; TSCA = Toxic Substances Control Act; vPvB = very Persistent, very Bioaccumulative substances

## 16.3. Key literature references and sources for data

Available upon request.

# 16.4. Methods used for classification of mixture according to Regulation (EC) No 1272/2008

The determination of classifications is derived via expert judgment and/or weight of evidence.

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# 16.5. Relevant R- and H-phrases

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

R10 Flammable.

R22 Harmful if swallowed.

R67 Vapours may cause drowsiness and dizziness.

# 16.6. Training advice

Review Safety Data Sheet before using product.

# 16.7. Further information

Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.