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

1.1. Product identifier: KODAK Black Ink Cartridge / 10XL, Text Black Ink

Product code: 3949922 - 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. For industrial use only.

**1.3. Details of the supplier of the safety data sheet:** KODAK LIMITED, Building 8, Croxley Green Business Park, Hatters Lane, Watford, WD18 8PX, Great Britain

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

## 1.4. Emergency telephone number:

Available during office hours only. IN EMERGENCY, telephone: 844 892 0111.

## 2. Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 (CLP):

Not hazardous according to GHS/Hazard - Communication regulations.

## 2.2. Label elements:

## Labelling according to 1272/2008/EC [CLP/GHS]:

Contains: Components either non-hazardous or below regulatory thresholds

## Hazard statements:

Not hazardous according to GHS/Hazard Communication regulations.

## 2.3. Other hazards

None known.

## 3. Composition/information on ingredients

Weight Component percent	CAS-No. EC No. REACH Reg. No.	Classification according to 1272/2008/EC	Reason for disclosure	
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10 - 20	2,2' -oxybise	2,2' -oxybisethanol			
		111-46-6 203-872-2 not applicable	Acute Tox. 4 H302	hazardous	
1 - 10	glycerol	lycerol			
		56-81-5 200-289-5 not applicable	not classified	Substance with a Community workplace exposure limit	
1 - < 5 Carbon bl		K			
		1333-86-4 215-609-9 not applicable	not classified	Substance with a Community workplace exposure limit	
0.1 - < 1	ethanediol				
		107-21-1 203-473-3 not applicable	Acute Tox. 4 H302	hazardous	
0.1 - < 1	1-methoxy-2-	1-methoxy-2-propanol			
		107-98-2 203-539-1 not applicable	Flam. Liq. 3 H226 STOT SE 3 H336	hazardous	

The data in this MSDS refer to the small amount (gram quantities) of ink which is absorbed on a felt pad and contained in a plastic cartridge.

Approximately 80% of the ink is water.

## 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 persist.

**4.1.2. Skin:** Wash off immediately with soap and plenty of water. Get medical attention if symptoms occur.

**4.1.3. Eyes:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lens, if worn. Get medical attention if symptoms persist.

4.1.4. Ingestion: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed:** This product is not expected to cause any health or safety hazards, when used as intended.

**4.3. Indication of any immediate medical attention and special treatment needed:** No information available.

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## 5. Firefighting measures

5.1. Extinguishing Media: Water spray, Carbon dioxide (CO2), Dry chemical, Foam.

## 5.2. Special hazards arising from the substance or mixture

- 5.2.1. Hazardous Combustion Products: Carbon oxides
- 5.2.2. Unusual Fire and Explosion Hazards: None.

**5.3.** Advice for firefighters: Wear self-contained breathing apparatus and protective suit. Fire or excessive heat may produce hazardous decomposition products.

## 6. Accidental release measures

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

6.2. Environmental precautions: Prevent runoff from entering drains, sewers, or streams.

**6.3. Methods and materials for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly 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:** No special precautionary measures should be needed under anticipated conditions of use. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

7.1.2. Prevention of Fire and Explosion: 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:** Keep in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep away from incompatible substances (see Incompatibility section.)

## 7.3. Specific end use(s): No information available.

## 8. Exposure controls/personal protection

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## 8.1. Control parameters

## 8.1.1. Occupational exposure controls

Chemical name	Regulatory List	Value Type	Value
2,2' -oxybisethanol	EH40	Time weighted average	23 ppm101 mg/m3
	EH40	Short term exposure limit	69 ppm303 mg/m3 (calculated)
glycerol	EH40	Time weighted average	10 mg/m3 Form of exposure (mist)
	EH40	Short term exposure limit	30 mg/m3 Form of exposure (mist) (calculated)
Carbon black	EH40	Time weighted average	3.5 mg/m3
	EH40	Short term exposure limit	7 mg/m3
2,2' -oxybisethanol	HSA	Time weighted average	23 ppm100 mg/m3
	HSA	Short term exposure limit	69 ppm300 mg/m3 (calculated)
Carbon black	HSA	Time weighted average	3 mg/m3 Form of exposure (inhalable fraction)
	HSA	Short term exposure limit	15 mg/m3 Form of exposure (inhalable fraction) (calculated)

## 8.2. Exposure controls

**8.2.1.** Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Controls should be sufficient so that applicable occupational exposure limits are not exceeded.

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

Eye protection: Wear safety glasses with side shields (or goggles).

**Hand protection:** Using the information provided in Section 2, seek the advice of the glove supplier as to the most suitable glove material. Avoid skin contact when mixing or handling the substance/preparation or a mixture by wearing impervious gloves and protective clothing appropriate to the risk of exposure.

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact:

Material	Thickness	Breakthrough time
Nitrile rubber	>= 0.38 mm	> 480 min
Neoprene	>= 0.65 mm	> 240 min
butyl-rubber	>= 0.36 mm	> 480 min

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Avoid natural rubber gloves.

The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374. This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

**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 - testing not performed

pH: No data available - testing not performed

Melting point/freezing point: No data available - testing not performed

Initial boiling point and boiling range: No data available

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

Evaporation rate: No data available - testing not performed

Flammability (Solid; gas) : No data available - testing not performed

Upper explosion limit: No data available - testing not performed

Lower explosion limit: No data available - testing not performed

Vapour pressure: No data available - testing not performed

Vapour density: No data available - testing not performed

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Specific gravity: No data available - testing not performed

Water solubility: soluble

Partition coefficient: n-octanol/water: No data available - testing not performed

Auto-ignition temperature: No data available - testing not performed

Decomposition temperature: No data available - testing not performed

Viscosity: No data available - testing not performed

Explosive properties: No data available - testing not performed

Oxidizing properties: No data available - testing not performed

## 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

## 11.1. Toxicokinetics, metabolism and distribution

No data available

## 11.2. Acute toxicity

No data available

## 11.3. Corrositivity and irritation

No data available

## 11.4. Sensitisation

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No data available

## 11.5. CMR effects

## 11.5.1. Germ cell mutagenicity

No information available.

#### 11.5.2. Carcinogenicity

No information available.

## 11.5.3. Reproductive toxicity

No information available.

## 11.6. Specific target organ toxicity - single exposure

No information available.

## 11.7. Specific target organ toxicity - repeated exposure

No information available.

#### 11.8. Aspiration hazard

No information available.

## 11.9. Information on likely routes of exposure

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

Eyes: 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 Oral LD50 Oral (Humans): 1,120 mg/kg Inhalation LC50 (Rat): > 5.08 mg/l / 4 hr OECD Test Guideline 403 Inhalation LC50 (Rat): > 4,600 mg/m3 / 4 hr Dermal LD50 (Rabbit): 11,890 mg/kg

## Mutagenicity/Genotoxicity Data:

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

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

#### Acute Toxicity Data:

Oral LD50 (Rat): 12,600 mg/kg Inhalation LC50 (Rat): > 570 mg/m3 / 1 hr Dermal LD50 (Rabbit): > 10 g/kg Skin irritation: slight Eye irritation: very slight

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

#### Acute Toxicity Data:

Oral LD50 (Rat): > 5,000 mg/kg Oral LD50 (Rat): > 15,400 mg/kg Dermal LD50 (Rabbit): > 3,000 mg/kg Skin irritation: No skin irritation Eye irritation: No eye irritation Sensitisation (Guinea pig): Did not cause sensitisation on laboratory animals.

## 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)

#### Data for 1-methoxy-2-propanol (CAS 107-98-2):

#### Acute Toxicity Data:

Oral LD50 (Rat): 2,973 - 7,986 mg/kg Inhalation LC50 (Rat): > 10000 ppm / 4 hr Inhalation LC50 (Rat): >7559 ppm / 6 hr Dermal LD50 (Rabbit): 13,000 mg/kg Skin irritation: none Eye irritation: slight

#### Carcinogenicity:

Inhalation (male and female Rat, 2 years): NOEL; 3,000 ppm

#### **Reproductive Toxicity Data:**

Inhalation (male and female Rat): NOEL for reproductive toxicity; 1,000 ppm Inhalation (male and female Rat): LOEL for reproductive toxicity; 3,000 ppm

## **Developmental Toxicity Data:**

Inhalation (female Rat): NOAEL for developmental toxicity; 3,000ppm

#### Data for ethanediol (CAS 107-21-1):

## Acute Toxicity Data:

Oral LDLo (Humans): 1,600 mg/kg Oral LD50 (Rat): 4,700 mg/kg

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> Inhalation (Rat): 2.5 mg/l / 6 hr Dermal LD50 (Rabbit): 10,607 mg/kg Dermal LD50 (Rat): 10,600 mg/kg Skin irritation: Mild skin irritation Eye irritation: none Sensitisation (human): none Sensitisation (Guinea pig): none

## 12. Ecological information

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

This product has not been tested for environmental effects.

## 12.1. Toxicity

Toxicity to fish (LC50):	> 100 mg/l estimated
Toxicity to daphnia (EC50):	> 100 mg/l estimated
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.

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**Waste material:** Waste material is currently not classified as hazardous waste under Directive 2008/98/EC, as amended. European Waste Catalogue EWC: 08 03 13 Waste ink other than those mentioned in 08 03 12

**Product containers:** If thoroughly cleaned, preferably by rinsing at least three times with small quantities of water, waste product packaging may be consigned for recovery or disposal as non hazardous waste. The European Waste Catalogue Code is 15 01 06 mixed packaging.

The product does not need to be labelled in accordance with EC directives or respective national laws. Dispose of contents/container in accordance with local regulation.

## 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

#### 1907/2006/EC Article 59(1) - Candidate List of Substances Subject to Authorisation

This mixture contains no ingredient which is subject to an authorisation according to Regulation (EC) No. 1907/2006 (REACH).

#### 1907/2006/EC - Annex XIV - Substances Subject to Authorization

This mixture does not contain substances which are subject to an authorization according to Regulation (EC) No. 1907/2006 (REACH).

## 1907/2006/EC - Potential Substances of Very High Concern

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

#### 1907/2006/EC - Annex XVII - Restrictions on Certain Dangerous Substances

This mixture contains ingredients which are subject to restrictions according to Regulation (EC) No. 1907/2006 (REACH): 2-methoxypropanol (216-455-5)

## Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

This mixture does not contain substances listed in Detergents Regulation (648/2004) - Derogations and Banned or Restricted Detergent Surfactants

## **Notification status**

Regulatory List	Notification status	
TSCA	Not all listed	
DSL	Not all listed	

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NDSL	None listed
EINECS	Not all listed
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
TCSI	Not all listed
TSCA 12(b)	Listed

"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:

Minor changes may be present due to component or regulatory data updates

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; EH40 = EH40/2005 Workplace Exposure Limits; 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; HSA = Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents); 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

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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.

## 16.5. Relevant R- and H-phrases

H226	Flammable liquid	and vapour.
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H302 Harmful if swallowed.

H336 May cause drowsiness or dizziness.

## 16.6. Training advice

Review Safety Data Sheet before using product.

## 16.7. Further information

This Safety Data Sheet has been compiled and is solely intended for this product. The information is based upon the present state of our knowledge.