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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. 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 EU Directives 1272/2008/EC [CLP/GHS]:

Not hazardous according to -- -- GHS/Hazard Communication regulations.

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 1272/2008/EC [CLP/GHS]:

Contains: Components either non-hazardous or below regulatory thresholds

Hazard statements:

Not hazardous according to GHS/Hazard Communication regulations.

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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' -oxybiseth	anol 111-46-6 203-872-2 not available	Acute Tox. 4 H302	*
1 - 10	glycerol	56-81-5 200-289-5 not available	**	**
1 - < 5	Carbon black	1333-86-4 215-609-9 not available	**	**
0.1 - < 1	ethanediol	107-21-1 203-473-3 01-2119456816-28- XXXX	Acute Tox. 4 H302	*
0.1 - < 1	1-methoxy-2-p	ropanol 107-98-2 203-539-1 01-2119457435-35- XXXX	Flam. Liq. 3 H226 STOT SE 3 H336 *	*

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

^{*} Substance classification as listed in Annex VI to Regulation (EC) No 1272/2008

^{**} Substance not listed in Annex VI to Regulation (EC) No 1272/2008

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

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.

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- **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

8.1. Control parameters

8.1.1. Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
2,2' -oxybisethanol		Time weighted average	23 ppm 101 mg/m3
•		Short term exposure limit	69 ppm 303 mg/m3
			Remarks: calculated
glycerol		Time weighted average	10 mg/m3
		O	Form of exposure: mist
		Short term exposure limit	30 mg/m3
			Form of exposure: mist
0 1 11 1		T'	Remarks: calculated
Carbon black		Time weighted average	3.5 mg/m3
		Short term exposure limit	7 mg/m3
2,2' -oxybisethanol	HSA	Time weighted average	23 ppm 100 mg/m3
		Short term exposure limit	69 ppm 300 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
Carbon black		Time weighted average	3 mg/m3
			Form of exposure: inhalable
		Short term exposure limit	15 mg/m3
			Remarks: calculated

8.2. Exposure controls

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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

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

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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

Water solubility: soluble

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

Auto-ignition temperature: No data available

Decomposition temperature: No data available

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.

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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

No information available.

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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: 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

Dermal LD50 (Rabbit): 11,890 mg/kg

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): 12,600 mg/kg

• Inhalation LC50 (Rat): > 570 mg/m3 / 1 hr

• Dermal LD50 (Rabbit): > 10 g/kg

Skin irritation: slight

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

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• 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 (no deaths occurred)

Dermal LD50 (Rabbit): 13,000 mg/kg

Skin irritation: noneEye 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

• 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.

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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.

Waste material: 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

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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
NDSL	None listed
EINECS	Not all listed
ELINCS	Listed
NLP	None listed
AICS	Not all listed

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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

[&]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:

Multiple changes due to format update

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 Chemicals and Chemical Substances; ppm = parts per million; REACH= Registration, Evaluation and Authorization of Chemicals; RID

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= 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.

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

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.