

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Approval/Revision date: 06.10.2014

Print Date: 25.11.2015

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

1.1. Product identifier: CLR INK CART/10C EAMER E/F/G/D/I/S, Protective Ink

Product code: 3949930 - Protective 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, 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:

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

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to EU Directives 1272/2008/EC [CLP/GHS]:

Hazard class / Hazard category	Hazard statements	Route of exposure
Repr. 2	H361	--
STOT SE 1	H370	--

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.

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

Contains: glycerol , Ethane-1,2-diol

Symbol(s):



Signal word: Danger

Hazard statements:

Suspected of damaging fertility or the unborn child.

Causes damage to organs if swallowed.

Kidney

Central nervous system

Precautionary statements:

Prevention

Use personal protective equipment as required.

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

Do not eat, drink or smoke when using this product.

Response

IF exposed: Call a POISON CENTER or doctor/ physician.

Storage

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulation.

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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 - 15	glycerol	56-81-5 200-289-5 not available	**	**
1 - < 10	Ethane-1,2-diol	107-21-1 203-473-3 01-2119456816-28-XXXX	Acute Tox. 4 H302 *	Xn; R22 *

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

* 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

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.

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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 any immediate medical attention and special treatment needed: No information available.

5. Firefighting measures

5.1. Extinguishing Media: Use appropriate agent for adjacent fire.

5.2. Special hazards arising from the substance or mixture

5.2.1. Hazardous Combustion Products: Fire or excessive heat may produce hazardous decomposition products., (see also Stability and Reactivity section).

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.

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

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7.1. Precautions for safe handling

7.1.1. Personal precautions: Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. 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: Cool conditions (5 - 30°C). Keep container tightly closed. 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
glycerol	EH40	time weighted average	10 mg/m ³
			<i>Form of exposure: mist</i>
		Short term exposure limit	30 mg/m ³
			<i>Form of exposure: mist</i>
			<i>Remarks: calculated</i>
Ethane-1,2-diol		time weighted average	10 mg/m ³
			<i>Form of exposure: particulates</i>
		time weighted average	20 ppm 52 mg/m ³
			<i>Form of exposure: vapour</i>
		Short term exposure limit	40 ppm 104 mg/m ³
			<i>Form of exposure: vapour</i>
		Short term exposure limit	30 mg/m ³
			<i>Form of exposure: particulate</i>
			<i>Remarks: calculated</i>
			<i>Potential for cutaneous absorption</i>

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glycerol	HSA	time weighted average	10 mg/m3
			<i>Form of exposure: mist</i>
		Short term exposure limit	30 mg/m3
			<i>Form of exposure: mist</i>
			<i>Remarks: calculated</i>
Ethane-1,2-diol		time weighted average	10 mg/m3
			<i>Form of exposure: particulate</i>
		time weighted average	20 ppm 52 mg/m3
			<i>Form of exposure: vapour</i>
		Short term exposure limit	40 ppm 104 mg/m3
			<i>Potential for cutaneous absorption</i>

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.

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

Colour: No data available

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: > 35 °C (> 95.0 °F) (estimated)

Flash point: > 93.3 °C(> 199.9 °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: No data available

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

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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

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No information available.

Reproductive toxicity

No information available.

Specific target organ toxicity - single exposure

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: Causes damage to organs if swallowed.

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

Acute Toxicity Data:

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

- 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: Mild skin irritation
- Eye irritation: very slight

Data for Ethane-1,2-diol (CAS 107-21-1):

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Acute Toxicity Data:

Oral LDLo (Humans): 1,600 mg/kg

- Oral LD50 (rat): 4,000 - 10,200 mg/kg
- Inhalation LC50 (rat): 100 mg/l / 2 hr
- Dermal LD50 (mouse): 3,500 mg/kg
- Dermal LD50 (rat): 10,600 mg/kg
- Eye irritation: No eye irritation
- Skin Sensitization (human): none

12. Ecological information

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

12.1. Toxicity

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

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

12.2. Persistence and degradability

Persistence and degradability: Not 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

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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	Listed
EINECS	Not all listed
ELINCS	None 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

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"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:

label information

Multiple changes due to format update

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 = 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

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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

H302	Harmful if swallowed.
H361	Suspected of damaging fertility or the unborn child.
H370	Causes damage to organs if swallowed.
R22	Harmful if swallowed.

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.
