

Safety Data Sheet

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

1.1. Product identifier: KODAK PHOTO-FLO 200 Solution

Product code: 1464510

Synonyms: 3107

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

1.2.1. Identified uses: Film or paper manufacturing chemical. For industrial use only.

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:

Irritant. Irritating to eyes and skin.

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:

pH: 6 - 9



Symbol/Indication of Danger: Xi: Irritant

Risk Phrases: R36/38: Irritating to eyes and skin.

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Safety Phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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
25 - 30	propane-1,2-diol	57-55-6 200-338-0 not available	**	**
5 - 10	Octylphenoxyethoxyethanol	9036-19-5 not available not available	**	C; R34, R65 **

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.

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: The product is not flammable. Use appropriate agent for adjacent fire.

5.2. Special hazards arising from the substance or mixture

5.2.1. Hazardous Combustion Products: None, (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.

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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

7.1. Precautions for safe handling

7.1.1. Personal precautions: Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Use with adequate ventilation.

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). Good general ventilation of 10 or more room volumes per hour in the work area is recommended.

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
Propylene glycol	EH40	time weighted average	10 mg/m3
			<i>Form of exposure: particulate</i>
		time weighted average	150 ppm 474 mg/m3
			<i>Form of exposure: total particulate and vapour</i>
		Short term exposure limit	30 mg/m3
			<i>Form of exposure: particulate</i>
			<i>Remarks: calculated</i>
		Short term exposure limit	450 ppm 1,422 mg/m3
			<i>Form of exposure: total particulate and vapour</i>
			<i>Remarks: calculated</i>
Propylene glycol	HSA	time weighted average	10 mg/m3
			<i>Form of exposure: particulate</i>
		time weighted average	150 ppm 470 mg/m3
			<i>Form of exposure: total vapour and particulates</i>

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8.2. Exposure controls

8.2.1. Appropriate engineering controls: Avoid exposure to mists and vapours by mixing solutions in closed vessels and/or under local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions.

8.2.2. Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields or protective goggles whenever mixing or handling solutions.

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
Consult your glove manufacturer.	--	

Consult your glove manufacturer for advice on what glove material to avoid.

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: 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: colourless

Odour: odourless

Odour Threshold: no data available

pH: 7.0

Melting point/freezing point: no data available

Initial boiling point and boiling range: > 100 °C (> 212.0 °F)

Flash point: does not flash

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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 (at 20.0 °C (68.0 °F)) : 24 mbar (18.0 mm Hg)

Vapour density: 0.6

Specific gravity: 1.028

Volatile fraction by weight: 60 - 65 %

Water solubility: complete

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

Autoignition 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.

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****General advice:**

Contains: Octylphenoxypolyethoxyethanol. The toxicological properties of this material have not been fully investigated and its handling and use may be hazardous.

Toxicokinetics, metabolism and distribution

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no data available

Acute toxicity

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

Corrosivity and irritation

- Skin irritation: slight
- Eye irritation: moderate

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.

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: Irritating to eyes.

Skin: Irritating to skin.

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

12. Ecological information

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

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12.1. Toxicity

Toxicity to fish (LC50): 10 - 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.

Additional ecological information:

Chemical Oxygen Demand (COD): ca. 201 g/l

Biochemical Oxygen Demand (BOD): ca. 377 g/l

13. Disposal considerations

13.1. Waste treatment methods

This information is provided to assist users in the correct disposal of working solutions prepared and used to Kodak specifications.

Working solution: Waste material is currently classified as hazardous under Council Directive 91/689/EEC. The European Waste Catalogue Code is 09 01 99 Wastes not otherwise specified. Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorized waste management companies.

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. Whenever possible, minimize waste by using the rinsing water to make up the working solution. The European Waste Catalogue Code is 15 01 02 plastic packaging.

Waste product packaging contaminated by residues of hazardous contents should be consigned for disposal as hazardous waste. In this case, the European Waste Catalogue Code is 15 01 10 packaging containing residues of or contaminated by dangerous substances.

14. Transport information

Not regulated for all modes of transportation.

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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	All listed
DSL	All listed
NDSL	None listed
EINECS	Not all listed
ELINCS	None listed
NLP	Listed
AICS	All listed
IECS	All listed
ENCS	All listed
ECI	All listed
NZIoC	All listed
PICCS	All 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

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

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

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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

R34	Causes burns.
R65	Harmful: may cause lung damage 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.
