

Safety Data Sheet

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

Product name: HORSELL 956 Negative Plate Developer

Product code: 7880735

Supplier: KODAK LIMITED, Hemel One, Boundary Way, Hemel Hempstead, HP2 7YU, Great Britain

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

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

Synonyms: F1629

Product Use: plate processing chemical (developer), For industrial use only.

2. Hazards identification

This Safety Data Sheet conforms to REACH Regulation (EC) 1907/2006.

Product: Irritant. Irritating to eyes.

3. Composition/information on ingredients

Weight %	Component	CAS-No.	EINECS-No./ ELINCS No.	Classification
1 - 5	glycerol	56-81-5	200-289-5	**
1 - 5	2-phenoxyethanol	122-99-6	204-589-7	Xn; R22, R36*
1 - 5	sodium methylnaphthalenesulphonate	26264-58-4	247-564-6	Xi; R36**
1 - 5	sodium octyl sulphate	142-31-4	205-535-5	Xi; R38, R41**
1 - 5	2,2'-iminodiethanol	111-42-2	203-868-0	Xn; R22, R38, R41, R48/22*

* Symbol and R Phrase according to EC Annex I

** Substance not listed in EC Annex I

4. First aid measures

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact with eyes, flush immediately with plenty of water and seek medical attention.

Skin: Immediately flush with plenty of water for at least 15 minutes and wash using soap. Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Give victim a glass of water. Get medical attention immediately. Never give anything by mouth to an unconscious person.

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5. Fire-fighting measures

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

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

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

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Personal precautions: See Section 8 for recommendations on the use of personal protective equipment.

Environmental precautions: 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.

Waste disposal: Contaminated absorbent should be disposed of in accordance with local regulations.

7. Handling and storage

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

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

Storage: Cool conditions (5 - 30°C). Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

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.

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Glycerol	EH40	time weighted average	10 mg/m ³
		Short term exposure limit	30 mg/m ³
Glycerol	HSA	time weighted average	10 mg/m ³
		Diethanolamine	time weighted average

Ventilation: 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.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

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

Skin and body 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.

Recommended Decontamination Facilities: Safety shower, eye wash, washing facilities as appropriate to condition of use.

9. Physical and chemical properties

Physical form: liquid

Colour: brown

Odour: solvent

Specific gravity: 1.0430

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

Vapour density: 0.6

Volatile fraction by weight: 80 - 85 %

Boiling point/boiling range: > 100 °C (> 212.0 °F)

Water solubility: completely soluble

pH: 9.7

Flash point: does not flash

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, Acids.

Hazardous decomposition products: Carbon oxides, nitrogen oxides (NO_x), Sulphur oxides

Hazardous Polymerization: Hazardous polymerisation does not occur.

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11. Toxicological information

Effects of Exposure

General advice:

Contains: 2,2'-iminodiethanol. Based on animal data, may cause adverse effects on the following organs/systems: kidney, liver, blood, nervous system, testes.

Contains: 2-phenoxyethanol. May cause blood disorders based on animal data.

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

Eyes: Irritating to eyes.

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

Ingestion: Expected to be a low ingestion hazard.

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

Acute Toxicity Data:

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

- Inhalation LC50 (rat): > 570 mg/m³ / 1 hr
- Dermal LD50 (rat): > 21,900 mg/kg
- Skin irritation: No skin irritation
- Eye irritation: No eye irritation

Data for 2-phenoxyethanol (CAS 122-99-6):

Acute Toxicity Data:

Oral LD50 (male rat): 1,345 mg/kg

- Oral LD50 (female rat): 1,902 mg/kg
- Dermal LD50: > 20 mL/kg
- Skin irritation: slight (repeated skin application)
- Skin Sensitization (guinea pig): negative
- Eye irritation (unwashed eyes): strong
- Eye irritation (washed eyes): slight to moderate

Mutagenicity/Genotoxicity Data:

Chromosomal aberration assay in vivo: negative

- CHO/HGPRT assay: negative (in presence and absence of activation)
- Mouse micronucleus assay: negative
- Salmonella typhimurium assay (Ames test): negative (in presence and absence of activation)

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

Repeated dose toxicity:

- Oral (90 days, rat): LOEL (Lowest observable effect level); 400 mg/kg/day (minor target organ)

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effects: kidney)

- Oral (90 days, rat): NOEL; 80 mg/kg/day

Developmental Toxicity Data:

Dermal: NOEL for developmental toxicity; 600mg/kg/day

- Dermal: LOEL for maternal toxicity; 600mg/kg/day (target organ effects: red blood cell)
- Dermal: NOEL for maternal toxicity; 300mg/kg/day

Data for sodium octyl sulphate (CAS 142-31-4):

Acute Toxicity Data:

Oral LD50 (male rat): 2,000 - 2,400 mg/kg

- Dermal LD50 (guinea pig): > 1,000 mg/kg

Data for 2,2'-iminodiethanol (CAS 111-42-2):

Acute Toxicity Data:

Oral LD50 (rat): 1,410 mg/kg

- Dermal LD50 (rabbit): 11.89 ml/kg
- Skin irritation: strong
- Eye irritation: Corrosive

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

Repeated dose toxicity:

- Inhalation (30-day, guinea pig): NOAEL; 0.6 ppm
- Feeding study (30-day, male rat): LOEL (Lowest observable effect level); 0.1 % in diet

12. Ecological information

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

Potential Toxicity:

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

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

Toxicity to algae (IC50): > 100 mg/l

Toxicity to other organisms (EC50): > 100 mg/l

Persistence and degradability: Readily biodegradable.

Chemical Oxygen Demand (COD): ca. 245 g/l

Biochemical Oxygen Demand (BOD): ca. 125 g/l

13. Disposal considerations

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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 02 Water based offset plate developer solutions. Dispose according to the local regulations or guidelines that apply to the category of waste. Ensure the use of properly authorised 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.

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

15. Regulatory information

Notification status

Regulatory List	Notification status
TSCA	Not all listed
DSL	Not all listed
NDSL	None listed
EINECS	Not all listed
ELINCS	None listed
NLP	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

"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.

Labelling:

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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Contains: 2-phenoxyethanol , sodium methylnaphthalenesulphonate , sodium octyl sulphate , 2,2'-iminodiethanol

pH: 9 - 12



Symbol/Indication of Danger: Xi: Irritant

Risk Phrases: R36: Irritating to eyes.

16. Other information

The following is an explanation of the meaning of the Symbol letters and Risk Phrases for the pure substance(s) referred to in Section 2 of this Safety Data Sheet.

Xn: Harmful

Xi: Irritant

R22: Harmful if swallowed.

R36: Irritating to eyes.

R38: Irritating to skin.

R41: Risk of serious damage to eyes.

R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.

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.
