

MATERIAL SAFETY DATA SHEET

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Version 1.01

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name: X-OMAT EX II Developer and Replenisher, Part C
KODAK X-OMAT EX II Developer and Replenisher, Part C

Product code: 1135433C

Supplier Carestream Health Canada, 8800 Dufferin Street, Suite 201, Vaughan, Ontario, L4K 0C5

For Emergency Health Information call: 800-424-9300

For other information contact: 1-866-792-5011

Synonyms PCD 6422

2. HAZARDS IDENTIFICATION

<p><u>Emergency Overview</u> May form explosive peroxides Harmful if swallowed May cause adverse kidney effects May cause central nervous system depression May cause adverse liver effects</p>			
Physical state liquid	Odor Slight	Color clear orange	
HMIS	Health Hazard - 1*	Flammability - 1	Physical - 0 Hazard
<u>Potential Health Effects</u>			
Eyes	May cause irritation.		
Skin	May cause irritation.		
Inhalation	Expected to be a low hazard for recommended handling.		
Ingestion	Harmful if swallowed. May cause adverse kidney effects. May cause central nervous system effects.		
Chronic Effects			
Chronic toxicity	May cause adverse liver effects. May cause adverse kidney effects.		
Aggravated Medical Conditions	None known.		
Environmental hazard	See Section 12 for additional Ecological Information.		

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Chemical Name	CAS-No	Weight %
Diethylene glycol	111-46-6	>95

4. FIRST AID MEASURES

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.
Notes to physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point:	Does not flash
Suitable Extinguishing Media	Use CO2, dry chemical, or foam.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Hazardous Combustion Products	Hazardous decomposition products due to incomplete combustion.

Specific hazards arising from the chemical
May form peroxides of unknown stability.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA **Health Hazard - 1** **Flammability - 1** **Stability - 0**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment. For personal protection see section 8.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
Other information	See Section 12 for additional information.

7. HANDLING AND STORAGE

Advice on safe handling	Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wash thoroughly after handling.
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Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Storage separately from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs	OSHA PEL	Advisory OEL
Diethylene glycol 111-46-6		TWA: 10 mg/m ³		

Occupational Exposure Controls

Engineering Measures

Ensure adequate ventilation. Apply technical measures to comply with the occupational exposure limits.

Personal Protective Equipment

General Information

These recommendations apply to the product as supplied.

Respiratory protection

Use only with adequate ventilation. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Eye/Face Protection

Safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing.

Hand Protection

Chemical resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid

ph 3.1

Flash point: Does not flash

Boiling point/boiling range > 100 °C

Vapor Pressure 1.3 mbar @ 20 °C

Vapor density 3.66

Density 1.18 g/cm³

Water Solubility completely soluble

Melting point/range: -7 °C

Specific Gravity 1.12

Bulk Density: No information available

Odor Slight

Color clear orange

Autoignition temperature: No information available

10. STABILITY AND REACTIVITY

Stability

May form explosive peroxides.

Incompatible products

Strong oxidizing agents. Strong acids. Strong bases. Sodium hydroxide.

Conditions to Avoid

Heat, flames and sparks.

Hazardous Decomposition Products None under normal use.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Product Information

Skin May cause irritation.
Eyes May cause irritation.
Inhalation Expected to be a low hazard for recommended handling.
Ingestion Harmful if swallowed. May cause adverse kidney effects. May cause central nervous system effects.

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Diethylene glycol	12565 mg/kg (Rat)	11890 mg/kg (Rabbit)	
Chemical Name	Other applicable information		
Diethylene glycol	Mild skin irritation - Moderate skin irritation Mild eye irritation Can cause kidney damage and CNS effects following ingestion. Repeated oral exposure to high doses can cause liver damage.		

Subchronic toxicity No information available
Chronic toxicity May cause adverse liver effects. May cause adverse kidney effects.
Carcinogenicity Contains no ingredient listed as a carcinogen.
Target Organ Effects Central nervous system, Kidney, Liver.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects .

Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Diethylene glycol		LC50= 75200 mg/L Pimephales promelas 96 h	EC50 = 84000 mg/L 48 h (Daphnia magna)

Persistence and degradability Expected to be readily biodegradable

Bioaccumulation: - No information available

Mobility - No information available

Chemical Name	log Pow
Diethylene glycol	-1.98

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with local regulations.

Contaminated packaging Do not re-use empty containers. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

The information given below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions. Please consult the product packaging for further details.

DOT Not regulated

TDG Not regulated

ICAO/IATA Not regulated

IMDG/IMO Not regulated

For transportation information, go to: <http://ship.carestreamhealth.com>.

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
Non-controlled

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

16. OTHER INFORMATION

Disclaimer for Label

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.

- Contains:

Hazardous Components

Chemical Name	CAS-No	Weight %
Diethylene glycol	111-46-6	>95

May form explosive peroxides. Harmful if swallowed. May cause adverse kidney effects. May cause central nervous system depression. May cause adverse liver effects.

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Wash thoroughly after handling.

Additional information is given in the Material Safety Data Sheet.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text