

MATERIAL SAFETY DATA SHEET.

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Version 2

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

Product name: KODAK RP X-OMAT Developer Starter.

Product code: 1332642

Supplier Carestream Health, Inc., 150 Verona Street, Rochester, New York 14608.

For Emergency Health Information call: 800-424-9300.

For other information contact: 800-328-2910.

Synonyms PCD 5607.

Product Use: Photographic chemical.

2. HAZARDS IDENTIFICATION

Warning!.

Emergency Overview

May be harmful if swallowed
May cause central nervous system depression

Physical state liquid.

Odor Odorless.

Color colorless.

HMIS

Health Hazard - 1

Flammability - 0

**Physical - 0
Hazard**

Potential Health Effects

Eyes	May cause slight irritation.
Skin	Substance may cause slight skin irritation.
Inhalation	Expected to be a low hazard for recommended handling. May cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.
Chronic Effects	
Chronic toxicity	Effects expected to be similar to those seen acutely.
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 %

Sodium bromide	7647-15-6	10-15
Non-Hazardous		
Chemical Name	CAS-No	Weight %
Water	7732-18-5	80-90

4. FIRST AID MEASURES

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention immediately if irritation persists.
Skin contact	Wash off immediately with plenty of water. If skin irritation persists, call a physician .
Inhalation	Move to fresh air in case of accidental inhalation of vapors. Get medical attention immediately if symptoms occur.
Ingestion	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
Notes to physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point:	. >. 94 °C.
Suitable Extinguishing Media	The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Hazardous Combustion Products	Thermal decomposition can lead to release of irritating gases and vapors.

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** - 2 **Flammability** - 0 **Stability** - 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with eyes. 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.
Technical measures/Storage conditions	Keep tightly closed in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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Occupational Exposure Controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
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Personal Protective Equipment

General Information	These recommendations apply to the product as supplied.
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Respiratory protection	None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
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Eye/Face Protection	Safety glasses with side-shields.
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Skin and body protection	Wear suitable protective clothing.
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Hand Protection	Impervious gloves.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid.	Odor Odorless.
ph . 6.6	Color colorless.
Flash point: . >. 94 °C.	Autoignition temperature: No information available.
Boiling point/boiling range . 100 °C. / 212 °F.	
Vapor Pressure . 24 mbar @ 20 °C.	
Vapor density . 0.6	
Density No information available.	
Volatile organic compounds (VOC) content 85 - 90 %.	
Water Solubility . completely soluble.	
Melting point/range: No information available.	
Specific Gravity . 1.1	
Bulk Density: No information available.	

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
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Incompatible products Strong oxidizing agents. Strong acids. Metal salts.

Conditions to Avoid Heating can release hazardous gases.

Hazardous Decomposition Products Hydrogen bromide. Sodium oxides.

Hazardous Polymerization None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Product Information.

Skin Substance may cause slight skin irritation.

Eyes May cause slight irritation.

Inhalation Expected to be a low hazard for recommended handling. May cause irritation of respiratory tract.

Ingestion May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system effects.

Acute toxicity Component Information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90 mL/kg (Rat)		
Sodium bromide	3400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	

Chemical Name	Other applicable information
Sodium bromide	Ingestion of bromide salts can cause nausea, vomiting, headache, irritability, delirium, memory loss, decreased appetite, joint pain, hallucinations, stupor, coma, and acne like rash on face, legs, and trunk.

Subchronic toxicity No information available.

Chronic toxicity Effects expected to be similar to those seen acutely.

Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen.

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects After dilution with a large amount of water, followed by secondary waste treatment, this material is not expected to cause adverse environmental effects.

Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Sodium bromide	5800 - 24000 mg/L EC50 96 h (Scenedesmus pannonicus)	LC50 24000 - 96000 mg/L Oryzias latipes 96 h LC50= 24000 mg/L Oryzias latipes 96 h LC50 16000 - 24000 mg/L Poecilia reticulata 96 h LC50= 16000 mg/L Poecilia reticulata 96 h LC50 15614 - 17428 mg/L Pimephales promelas 96 h LC50> 1000 mg/L Lepomis macrochirus 96 h LC50 0.054 - 0.081 mg/L Oncorhynchus mykiss 96 h LC50> 1000 mg/L Oncorhynchus mykiss 96 h	EC50 5800 - 48000 mg/L 48 h (Daphnia magna) EC50 5700 - 10800 mg/L 48 h (Daphnia magna)

Persistence and degradability Not readily biodegradable.

Bioaccumulation: No information available.

Mobility No information available.

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. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

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.

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes.
Chronic Health Hazard	No.
Fire Hazard	No.
Sudden Release of Pressure Hazard	No.
Reactive Hazard	No.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

TSCA

Chemical Name	U.S. - TSCA (Toxic Substances Control Act) - Section 8(a) - Chemical-Specific Reporting and Recordkeeping
Water	Partially exempt chemical substance termed Petroleum Process Stream

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

International Regulations

Mexico - Grade

Slight risk, Grade 1.

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.

Warning!.

Contains:.

Hazardous Components

Chemical Name	CAS-No	Weight %
Sodium bromide	7647-15-6	10-15

May be harmful if swallowed. May cause central nervous system depression.

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.
