Carestream

MATERIAL SAFETY DATA SHEET

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

Identification of the substance or mixture

Product name: KODAK X-OMAT EX II Developer and Replenisher, Part 2

Product code: 6585038DEV2

Pure substance/mixture Mixture

Use of the Substance/Mixture

Photographic chemical.
Restricted to professional users.

Company/Undertaking Identification

Supplier CARESTREAM o Brasil Comercio e Servicos de Produtos Medicos Ltda
Rodovia Presidente Dutra Km 154,7, Prédio nº 6 - 1º andar, Parte A, São José dos Campos, São Paulo, CEP 12.240-420

For further information, please contact:
For environment, health and safety information, email: WW-EHS@carestreamhealth.com

For other information contact: 800-328-2910

Emergency telephone

+(55)-2139581449

2. HAZARDS IDENTIFICATION

The preparation is classified as dangerous in accordance with Directive 1999/45/EC.

Classification

Symbol(s) Xn - Harmful

Classification Xn;R22 - Xi;R37/38 - Xi;R41 - R42/43

Labeling

Symbol(s)

Xn - Harmful

Xn - Harmful

R-phrase(s)
R22 - Harmful if swallowed
R41 - Risk of serious damage to eyes
R37/38 - Irritating to respiratory system and skin
R42/43 - May cause sensitization by inhalation and skin contact

S-phrase(s)
S 3 - Keep in a cool place
S23 - Do not breathe gas/fumes/vapor/spray
S24 - Avoid contact with skin
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
S37/39 - Wear suitable gloves and eye/face protection

Other hazards which do not result in classification

Physical-Chemical Properties	May form peroxides of unknown stability.
Properties Affecting Health	May cause adverse kidney effects. May cause adverse liver effects. May cause central nervous system depression.
Environmental properties	Should not be released into the environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice	Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance. Do not breathe vapors, mist or gas.
Eye contact	Immediate medical attention is required. Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Skin contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use.
Inhalation	Move to fresh air. Consult a physician. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required.
Ingestion	Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Drink plenty of water. Rinse mouth. Never give anything by mouth to an unconscious person.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Skin contact	Irritating to skin. May cause sensitization by skin contact. May be harmful in contact with skin.
Eye contact	Risk of serious damage to eyes.

Inhalation Harmful by inhalation. May cause sensitization by inhalation. Irritating to respiratory system. Contact with strong acids liberates sulfur dioxide. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Ingestion Harmful if swallowed. May cause adverse kidney effects. May cause central nervous system depression.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician May cause sensitization of susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point: See chapter 9. PHYSICAL AND CHEMICAL PROPERTIES

Suitable Extinguishing Media

Suitable Extinguishing Media The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers / tanks with water spray.

Extinguishing media which shall not be used for safety reasons None.

Specific hazards arising from the chemical

Special Hazard Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Thermal decomposition can lead to release of irritating gases and vapors. May form peroxides of unknown stability.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters Wear self contained breathing apparatus for fire fighting if necessary.

Other information

Other information Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. For personal protection see section 8.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.
Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Other information

See Section 12 for additional Ecological information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. Use only in area provided with appropriate exhaust ventilation.
Prevention of fire and explosion	Keep from contact with oxidizing materials. If peroxide formation is suspected, do not open or move container. Minimize exposure to air. Do not distill or allow to evaporate to near dryness.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions	Protect from light. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperatures between 5°C and 30°C. Do not freeze. Do not allow evaporation to dryness.
Materials to Avoid	Oxidizing agents. Strong acids. Contact with strong acids liberates sulfur dioxide.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Appropriate engineering controls

Engineering Measures	Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment (PPE)

Personal Protective Equipment

General Information	If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.
Respiratory protection	None under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
Eye Protection	Tightly fitting safety goggles If splashes are likely to occur, wear:
Skin and body protection	Lightweight protective clothing. Apron. Impervious gloves. Long sleeved clothing. Wear suitable protective clothing. Antistatic boots.

Hand Protection Impervious gloves Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion Avoid natural rubber gloves.

In case of full contact:			
Glove material	**Glove thickness**	**Break through time**	**Remarks**
Nitrile rubber	>= 0.38 mm	> 480 min	
Neoprene	>= 0.65 mm	> 240 min	
butyl-rubber	>= 0.36 mm	> 480 min	

Hygiene measures When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid
ph 2.75
Flash point: > 93.430 °C
Boiling point/boiling range > 35 °C

Odor No information available
Color No information available
Autoignition temperature: No information available

Vapor Pressure
Vapor density No information available
Density No information available
Water Solubility No information available completely soluble
Melting point/range: No information available
Specific Gravity No information available
Bulk Density: No information available

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use

Chemical stability

Stable under recommended storage conditions. Reacts with air to form peroxides. Hazardous polymerization does not occur.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Exposure to air or moisture over prolonged periods. Do not allow evaporation to dryness. Shock. To avoid thermal decomposition, do not overheat. Do not freeze. Exposure to light.

Materials to Avoid

Oxidizing agents. Strong acids. Contact with strong acids liberates sulfur dioxide.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Product Information

Skin contact Irritating to skin. May cause sensitization by skin contact. May be harmful in contact with skin.

Eye contact Risk of serious damage to eyes.

Inhalation Harmful by inhalation. May cause sensitization by inhalation. Irritating to respiratory system. Contact with strong acids liberates sulfur dioxide. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Ingestion Harmful if swallowed. May cause adverse kidney effects. May cause central nervous system depression.

Acute toxicity - Component Information

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.
1,5-Pentanedisulfonic acid, 1,5-dihydroxy-, disodium salt	Moderate eye irritation - Slight Moderate skin irritation - Strong Skin Sensitization (guinea pig): negative Was not a skin sensitizer in animal studies and has not been reported to cause allergic skin reaction in humans. In an alkaline solution, glutaraldehyde bis(sodium bisulfite) may release free glutaraldehyde, a known skin sensitizer.

Acetic acid	Severe eye irritation Severe skin irritation Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occured, and the ventilation rate in the room.
1H-Indazole, 5-nitro-	Mild skin irritation Mild skin irritation (Repeated exposure) Did not cause sensitization on laboratory animals Mild eye irritation

Aggravated Medical Conditions Allergies, Skin disorders, Respiratory disorders, Preexisting eye disorders, Kidney disorders, Liver disorders, Neurological disorders.

Subchronic toxicity

no data available

Chronic toxicity

Sensitization May cause sensitization by inhalation and skin contact.

Neurological effects Ingredients of the product may affect the nervous system. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

Chronic toxicity Avoid repeated exposure. May produce an allergic reaction. May cause adverse liver effects.

Target Organ Effects Respiratory system, Eyes, Skin, Teeth, Центральная нервная система, Kidney, Liver.

CMR Effects

Carcinogenicity No information available.

IARC: (International Agency for Research on Cancer)
ACGIH: (American Conference of Governmental Industrial Hygienists)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains a substance which is: Very toxic to aquatic organisms

Acute aquatic toxicity Product Information
No information available

Acute aquatic toxicity Component Information

Persistence and degradability
No information available

Bioaccumulative potential
No information available

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products	Dispose of in accordance with local regulations.
Contaminated packaging	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.

ADR/RID	Not regulated
IMDG/IMO	Not regulated
ICAO/IATA	Not regulated
ADN	Not regulated
DOT	Not regulated
TDG	Not regulated

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

15. REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Complies
TSCA	Complies
DSL/NDSL	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

International Regulations

Mexico - Grade	Slight risk, Grade 1

16. OTHER INFORMATION

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

End of Material Safety Data Sheet