

# Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 1/7

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

**Product name:** KODAK RP X-OMAT LO Fixer and Replenisher, Part B

**Product code:** 8868804, Part B

**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 6166

**Product Use:** Professional x-ray film photographic processing solution, For industrial use only.

## 2. Hazards identification

**CONTAINS:** Aluminium sulphate (10043-01-3), Isothiazolone derivatives (not applicable)

### WARNING!

**CAUSES EYE IRRITATION**

**MAY CAUSE ALLERGIC SKIN REACTION**

**MAY BE HARMFUL IF SWALLOWED.**

**HMIS III Hazard Ratings:** Health - 2, Flammability - 0, Physical Hazard - 0

**NFPA Hazard Ratings:** Health - 3, Flammability - 0, Instability - 0

NOTE: HMIS III and NFPA hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. An asterisk (\*), in the HMIS III health field, designates potential chronic or target organ hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

## 3. Composition/information on ingredients

Weight %	Components (CAS-No.)
10 - 15	Aluminium sulphate (10043-01-3)
0.0015 - < 0.3	Isothiazolone derivatives (not applicable)

## 4. First aid measures

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

**Eyes:** Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

# Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 2/7

---

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

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

## 5. Fire-fighting measures

**Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing. Fire or excessive heat may produce hazardous decomposition products.

**Hazardous Combustion Products:** None (noncombustible), (see also Hazardous Decomposition Products section).

**Unusual Fire and Explosion Hazards:** None.

## 6. Accidental release measures

**Methods for cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

## 7. Handling and storage

**Personal precautions:** Avoid breathing mist or vapour at concentrations greater than the exposure limits. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

**Prevention of Fire and Explosion:** No special technical protective measures required.

**Storage:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

## 8. Exposure controls/personal protection

### Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Aluminium sulphate	ACGIH	time weighted average <i>Expressed as Al</i>	2 mg/m <sup>3</sup>

**Ventilation:** Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

**Respiratory protection:** None should be needed. If engineering controls do not maintain airborne

## Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 3/7

---

concentrations below recommended exposure limits, an approved respirator must be worn. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

**Eye protection:** Wear safety glasses with side shields (or goggles).

**Skin and body protection:** Wear impervious gloves and protective clothing appropriate for the risk of exposure.

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

### 9. Physical and Chemical Properties

**Physical form:** liquid

**Colour:** colourless

**Odour:** odourless

**Specific gravity:** 1.11

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

**Vapour density:** 0.6

**Volatile fraction by weight:** 85 - 90 %

**Boiling point/boiling range:** > 100.0 °C (> 212.0 °F)

**Water solubility:** complete

**pH:** 2.9

**Flash point:** does not flash

### 10. Stability and reactivity

**Stability:** Stable under normal conditions.

**Incompatibility:** None with common materials and contaminants with which the material may reasonably come into contact.

**Hazardous decomposition products:** Sulphur oxides.

**Hazardous Polymerization:** Hazardous polymerisation does not occur.

### 11. Toxicological information

#### Effects of Exposure

# Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 4/7

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## General advice:

Contains: Aluminium sulphate. Ingestion may cause nausea, vomiting, abdominal pains, and diarrhea.

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

**Eyes:** No specific hazard known. May cause transient irritation.

**Skin:** May cause allergic skin reaction based on human experience.

**Ingestion:** May cause irritation of the gastrointestinal tract if swallowed.

## Acute Toxicity Data:

- Eye irritation: slight

## Data for Aluminium sulphate (CAS 10043-01-3):

### Acute Toxicity Data:

- Oral LD50 (rat): > 5,000 mg/kg (Information taken from reference works and the literature.)
- Skin irritation: No skin irritation
- Eye irritation: moderate

### Mutagenicity/Genotoxicity Data:

- Cell transformation assay: negative

## 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):	10 - 100 mg/l
Toxicity to other organisms (EC50):	> 100 mg/l

**Persistence and degradability:** Readily biodegradable.

## 13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

# Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 5/7

---

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.

**IATA:** UN Number: UN3264  
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (Aluminium sulphate)  
Class: 8  
Packaging group: III

**IMDG:** UN Number: UN3264  
Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate)  
Class: 8  
Packaging group: III

**US DOT:** UN Number: UN3264  
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (Aluminium sulphate)  
Class: 8  
Packaging group: III

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

## 15. Regulatory information

### Notification status

Regulatory List	Notification status	Other information	Not listed
EINECS	y (positive listing)	-	
TSCA	y (positive listing)	On TSCA Inventory	
AICS	y (positive listing)	-	
DSL	y (positive listing)	All components of this product are on the Canadian DSL list.	
ENCS (JP)	y (positive listing)	-	
KECI (KR)	y (positive listing)	-	
PICCS (PH)	y (positive listing)	-	
INV (CN)	y (positive listing)	-	

A N (Negative listing) indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Carestream Health.

### Other regulations

American Conference of Governmental Industrial Hygienists (ACGIH):

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

# Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 6/7

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International Agency for Research on Cancer (IARC):	carcinogen by ACGIH. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
U.S. National Toxicology Program (NTP):	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
U.S. Occupational Safety and Health Administration (OSHA):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
California Prop. 65:	none
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Aluminium sulphate
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	No components are subject to the Massachusetts Right to Know Act.
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Aluminium sulphate

## 16. Other information

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.

### US/Canadian Label Statements:

**CONTAINS: Aluminium sulphate (10043-01-3), Isothiazolone derivatives (not applicable)**

**WARNING!**  
**CAUSES EYE IRRITATION**  
**MAY CAUSE ALLERGIC SKIN REACTION**  
**MAY BE HARMFUL IF SWALLOWED.**

Avoid prolonged or repeated breathing of mist or vapour.  
Avoid contact with eyes, skin, and clothing.  
Use only with adequate ventilation.

## Material Safety Data Sheet

Revision Date: 08/25/2008  
000000019089/Version: 2.0  
Print Date: 09/09/2008  
Page: 7/7

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Wash thoroughly after handling.

**FIRST AID:** If symptomatic, move to fresh air. Get medical attention if symptoms occur. Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes. If swallowed, do NOT induce vomiting. Give victim a glass of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Keep out of reach of children.

Do not handle or use until safety precautions in Material Safety Data Sheet (MSDS) have been read and understood.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

**IN CASE OF FIRE:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**IN CASE OF SPILL:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

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The information contained herein is furnished without warranty of any kind. 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.

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