

## Material Safety Data Sheet

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

**Product name:** KODAK CINEFLURE II Fixer and Replenisher, Part B

**Product code:** 1586585 - Part B

**Supplier:** Carestream Health Canada Company, 6 Monogram Place, Suite 200, Toronto, Ontario, M9R 0A1

MSDS Prepared by: Health, Safety and Environment, Carestream Health, Inc., Rochester, New York, 14608.

For Emergency Health Information call: 1-800-424-9300.

For Other Information, call the Marketing and Distribution Center in Your Area.

**Synonyms:** PCD 5963

### 2. Hazards identification

**CONTAINS:** Aluminium sulphate (10043-01-3)

**WARNING!**  
**CAUSES EYE IRRITATION**  
**MAY BE HARMFUL IF SWALLOWED.**

**HMIS II Hazard Ratings:** Health - 2, Flammability - 0, Reactivity (Stability) - 0

**NFPA Hazard Ratings:** Health - 2, Flammability - 0, Instability - 0

NOTE: HMIS II 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 II 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.)
85 - 90	Water (7732-18-5)
5 - 10	Aluminium sulphate (10043-01-3)

### 4. First aid measures

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

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**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin:** Wash off with soap and water. Get medical attention if symptoms occur.

**Ingestion:** If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center 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 contaminated surface thoroughly.

### 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. Wash thoroughly after handling.

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

**Storage:** Keep container tightly closed.

### 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

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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:** For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

**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:** 90 %

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

**Water solubility:** complete

**pH:** 2.9

**Flash point:** none, noncombustible liquid

### 10. Stability and reactivity

**Stability:** Stable

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

**Hazardous decomposition products:** sulphur oxides.

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

### 11. Toxicological information

#### Effects of Exposure

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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:** Causes eye irritation. Airborne dust/mist/vapor irritating.

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

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

## 12. Ecological information

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

Potential Toxicity:

Fish LC50: > 100 mg/l

Daphnid EC50: > 100 mg/l

Algal IC50: > 100 mg/l

Waste treatment organisms EC50: > 100 mg/l

Organics Readily Degradable: Not applicable

Potential Bioaccumulation:  $\log P_{ow} < 1$

COD (approximate): < 1 g/l

BOD (approximate): < 1 g/l

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

## 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

Not regulated for all modes of transportation.

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

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### 15. Regulatory information

**WHMIS (Canada):** D2B

**WHMIS Symbol(s):**



**U.S. California Prop. 65:** none

**Carcinogenicity Classification (components present at 0.1% or more):**

International Agency for Research on Cancer (IARC): none  
American Conference of Governmental Industrial Hygienists (ACGIH): Aluminium sulphate  
U.S. National Toxicology Program (NTP): none  
U.S. Occupational Safety and Health Administration (OSHA): none

**Chemical(s) subject to the reporting requirements of U.S. Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372:**  
none

### 16. Other information

**US/Canadian Label Statements:**

**CONTAINS:** Aluminium sulphate (10043-01-3)

**WARNING!**  
**CAUSES EYE IRRITATION**  
**MAY BE HARMFUL IF SWALLOWED.**

Avoid contact with eyes, skin, and clothing.  
Avoid prolonged or repeated breathing of mist or vapour.  
Use with adequate ventilation.  
Wash thoroughly after handling.

**FIRST AID:** If inhaled, move to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. If swallowed, only induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Keep out of reach of children.

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

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

**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 contaminated surface thoroughly.

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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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R-1, S-1, F-0, C-0