

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

Identification of the substance or mixture

Product name: X-OMAT ICM F-1 Fixer and Replenisher, Part B
KODAK X-OMAT ICM F-1 Fixer and Replenisher, Part B

Product code: 6610182B

Use of the Substance/Mixture

Product Use: Photographic chemical, Restricted to professional users.

Company/Undertaking Identification

Supplier Carestream Health Japan Co., Ltd., 2-27-1 Shinkawa, Chuo-ku, Tokyo, Japan

For further information, please contact:

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

Emergency telephone

Emergency telephone +(81)-345209637

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Serious eye damage/eye irritation	Category 1
Corrosive to Metals	Category 1

GHS Label elements, including precautionary statements



DANGER

Hazard statements

H318 - Causes serious eye damage

H290 - May be corrosive to metals

Precautionary Statements

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/ physician

P334 - Immerse in cool water/ wrap in wet bandages

P390 - Absorb spillage to prevent material damage

P406 - Store in corrosive resistant container with a resistant inliner

Other hazards which do not result in classification

General Hazards

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Weight %
Water	85 - 90
Aluminum sulfate	10 - 15

4. FIRST AID MEASURES

Description of necessary first-aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye contact	Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.

Most important symptoms/effects, acute and delayed

Skin contact	May cause skin irritation and/or dermatitis.
Eye contact	Risk of serious damage to eyes.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons

None.

Specific hazards arising from the chemical

Special Hazard

Non-combustible.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Other information

Other information

None known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with eyes.

Advice for emergency responders

For personal protection see section 8

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system.

Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Clean contaminated surface thoroughly.

Other information

See Section 12 for additional Ecological information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

When using, do not eat, drink or smoke. For personal protection see section 8.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place.

Materials to Avoid Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits Contains no substances with occupational exposure limit values

Appropriate engineering controls

Engineering Measures Eyewash stations. Showers. Ventilation systems.

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. None under normal use conditions.

Respiratory protection

Eye Protection

Tightly fitting safety goggles.

Skin and body protection

Wear suitable protective clothing.

Hand Protection

Protective gloves

Hygiene measures Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state liquid

ph 2.9

Flash point: > 93.900 °C

Boiling point/boiling range > 100 °C / 212 °F

Odor Odorless

Color colorless

Autoignition temperature: No information available

Vapor Pressure 24 hPa

Vapor density 0.6

Density No information available

Water Solubility completely soluble

Melting point/range: No information available

Specific Gravity 1.11

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.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Do not freeze.

Materials to Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Product Information

Skin contact	May cause skin irritation and/or dermatitis.
Eye contact	Risk of serious damage to eyes.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity
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Oral	47,850.00 mg/kg
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Dermal	No information available
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Inhalation	
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Gas	No information available
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Mist	No information available
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Vapor	No information available
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Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	90,000 mg/kg (Rat)		
Aluminum sulfate	> 5000 mg/kg (Rat)		

Chemical Name	Other applicable information
Aluminum sulfate	Severe eye irritation No skin irritation Cell transformation assay: negative Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Aggravated Medical Conditions	Skin disorders, Respiratory disorders.
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Subchronic toxicity

Chronic toxicity

Sensitization	No information available.
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Neurological effects	No information available.
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Target Organ Effects	Respiratory system, Eyes.
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CMR Effects

Carcinogenicity	Contains no ingredient listed as a carcinogen.
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12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute aquatic toxicity Product Information

No information available

Acute aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Aluminum sulfate		LC50= 100 mg/L Carassius auratus 96 h LC50= 37 mg/L Gambusia affinis 96 h	EC50 = 136 mg/L 15 min (Daphnia magna)

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products

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.

ADR/RID

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s.
Technical Name	Aluminum sulfate
Hazard class	8
Packing Group	III
Classification Code	C1
ADR/RID-Labels	8
Special Provisions	274
ADR Hazard Id (Kemmler Number)	80
Limited Quantity	LQ7

IMDG/IMO

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s.
Technical Name	Aluminum sulfate
Hazard class	8
Packing Group	III
Marine Pollutant	NP
EmS No.	F-A, S-B
Special Provisions	223, 274
Limited quantity DFDA	5 L

ICAO/IATA

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s.
Technical Name	Aluminum sulfate
Hazard class	8
Packing Group	III
ERG Code	8L
Special Provisions	A3
Limited quantity DFDA	1 L

ADN

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s.
Technical Name	Aluminum sulfate
Hazard class	8
Packing Group	III
Classification Code	C1
Special Provisions	274
Limited quantity DFDA	LQ7

TDG

UN/ID No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s.

Technical Name	Aluminum sulfate
Hazard class	8
Packing Group	III

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

National regulatory information

Industrial Safety and Health Law:

Chemical Name	Dangerous Substances	organic solvent	Harmful Substances Whose Names Are to be Indicated on the Label	Biological monitoring
Aluminum sulfate	>1 %	not applicable	not applicable	

Fire Service Law: None

16. OTHER INFORMATION

Revision Date	2013-11-01
Revision Note	(M)SDS sections updated

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