

G-335 INDUSTRIAL X-RAY FIXER PART B

SUBID:000001007277

Version 1

Print Date 06-12-2009

Revision Date 02-03-2009

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Identification of the substance/preparation

Product name : G-335 INDUSTRIAL X-RAY FIXER PART B
 MSDS Number : 000001007277
 Use of the Substance/Preparation : Photographic fixing concentrate
 Product code : LXW6T, LXW7V, LXW8X, 38WRN
 Business group : MAT

Company/Undertaking Identification

Agfa Corporation
 100 Challenger Road
 Ridgefield Park, NJ 07660
 U.S.A.



Transport Emergency

Non-transportation

Call CHEMTREC : +1 800 4249300
 International : +1 703 5273887

Health Emergency Phone : +1 303 6235716
 Agfa Information Phone : +1 201 4402500

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Aqueous photographic fixing concentrate, mainly consisting of:

	<u>CAS-No.</u>	<u>Concentration [%]</u>	
• Aluminium sulphate	10043-01-3	>= 10.0	- <= 20.0
• Acetic acid	64-19-7	>= 5.0	- <= 10.0
• Water	7732-18-5	>= 80.0	- <= 100.0

SECTION 3. HAZARDS IDENTIFICATION

Emergency Overview

Form : Liquid.
 Colour : Colourless.
 Odour : Smell of acetic acid

WARNING !

Irritating gases/fumes may be given off during burning or thermal decomposition.
 May cause respiratory tract irritation. Causes skin irritation. Causes eye irritation.

Potential Health Effects

Primary Routes of Entry : Eye contact. Skin contact. Inhalation of vapours or mists. Accidental

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Aggravated Medical Condition : ingestion.
Persons with preexisting eye, skin or respiratory tract disorders may be more susceptible to the effects of this product.

Acute health effects

Inhalation

- Aluminium sulphate : Is expected to be irritating to the respiratory tract with symptoms of coughing, sore throat, and runny nose.
- Acetic acid : Is expected to be irritating to the respiratory tract with symptoms of coughing, sore throat, and runny nose.

Skin contact

Product : Can be irritating to the skin with symptoms of reddening, itching, and swelling.

- Aluminium sulphate : Can be severely irritating with symptoms of reddening, itching, swelling, and possible burns.
- Acetic acid : Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage. Skin sensitization is rare, but has been reported.

Eye contact

- Aluminium sulphate : May cause irritation and possible corneal burns due to the reaction of the compound with moisture to form sulfuric acid.
- Acetic acid : Overexposure can cause severe irritation resulting in burning, stinging, reddening, tearing, swelling and possible injury to the cornea depending on the concentration.

Ingestion

- Aluminium sulphate : May cause irritation or burn the digestive tract.
- Acetic acid : Swallowing high concentrations may cause severe injury.

Carcinogenicity

The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

SECTION 4. FIRST AID MEASURES

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
- Ingestion : Rinse mouth with plenty of water. Seek medical advice.
- Inhalation : Take person to fresh air. If necessary, seek medical advice.

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SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : All extinguishing media are suitable.
 Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.
 Additional advice : Product is not combustible.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : See section : Exposure controls / personal protection.
 Environmental precautions : For waste disposal see section 13.
 Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.
 Additional advice : Wash away residues with plenty of water.

SECTION 7. HANDLING AND STORAGE

Storage

Advice on common storage : Store away from strong alkalis.
 Requirements for storage areas and containers : Keep container tightly closed. Protect from direct sunlight.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values (US)

Components	CAS-No.	Values	Type	Revision Date	Basis
Acetic acid	64-19-7	10 ppm 15 ppm 25 mg/m ³ 25 mg/m ³	TWA STEL PEL TWA	2002 2002 06 1993 1989	ACGIH ACGIH OSHA Z1 OSHA Z1A

Exposure Limit Values (CA)

Components	CAS-No.	Values	Type	Revision Date	Basis
Acetic acid	64-19-7	25 mg/m ³ 37 mg/m ³	TWA STEL	2006 2006	OEL (QUE) OEL (QUE)

Exposure controls

Hygiene measures : Observe normal precautions when handling chemicals. Avoid inhaling vapour. Keep away from foodstuffs, drinks and tobacco.
 Respiratory protection : Appropriate respiratory protection and/or exhaust locally. Under

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- normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02.
- Hand protection** : Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \geq 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness \geq 0.38 mm, breakthrough time > 480 min) or neoprene (thickness \geq 0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex.
- Eye protection** : Safety glasses.
- Personal protective equipment** : Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : Liquid.
- Colour** : Colourless.
- Odour** : Smell of acetic acid
- Relative density** : 1.036 at 20 °C (68 °F)
- pH (25 °C, 77 °F)** : 1.8
- Melting point/range** : < 0 °C (< 32 °F)
- Boiling point/range** : > 100 °C (> 212 °F)
- Relative vapour density** : Not applicable
- VOC content** : 7.1 %
VOC content excluding water

SECTION 10. STABILITY AND REACTIVITY

- Stability** : The product is stable under normal conditions of storage and use.
- Hazardous decomposition products** : Hazardous decomposition products
None
- Thermal decomposition** : Not applicable
- Conditions to avoid** : Avoid contact with strong alkalis. Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

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- Aluminium sulphate : LD50 rat > 5,000 mg/kg
 - Acetic acid : LD50 rat 3,310 mg/kg
- Acute inhalation toxicity**
- Acetic acid : LC50 rat 11.4 mg/l/ 4 h
- Acute dermal toxicity**
- Acetic acid : LD50 rabbit 1,060 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradation

- Acetic acid : OECD 301D Assessment of biological degradability
99 % after 30 d

Ecotoxicity effects

Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to fish

- Acetic acid : Species: Pimephales promelas (fathead minnow)
LC50: 88 mg/l/ 96 h

Toxicity to daphnia

- Acetic acid : Species: Daphnia magna (water flea)
EC50: 47 mg/l/ 24 h

Toxicity to algae

- Acetic acid : Species: Scenedesmus quadricauda (algae)
EC10: 4,000 mg/l/ 8 d

Toxicity to bacteria

- Acetic acid : Species: Pseudomonas putida (bacteria)
EC10: 2,850 mg/l/ 16 h

Further information on ecology

Chemical Oxygen Demand : 72,700 mg/l
(COD)

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

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Waste disposal should be in accordance with existing federal, state and local environmental control laws. Discharge to sewer may require approval of permitting authority and may require pretreatment.

US. RCRA Hazardous Waste Classification (40 CFR 261)

When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002).

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)

All of the components of this product are listed on the TSCA Inventory.

US. SARA 311/312 Hazard Categories

Acute Health Hazard.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

- Aluminium sulphate : Reportable quantity: 5,000 lbs
- Acetic acid : Reportable quantity: 5,000 lbs

US. California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

State Right-to-Know Information

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

- | | <u>CAS-No.</u> | <u>Concentration</u> [%] |
|----------------------|----------------|--------------------------|
| • Aluminium sulphate | 10043-01-3 | >= 10.0 - <= 20.0 |
| • Acetic acid | 64-19-7 | >= 5.0 - <= 10.0 |

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

- | | <u>CAS-No.</u> | <u>Concentration</u> [%] |
|----------------------|----------------|--------------------------|
| • Aluminium sulphate | 10043-01-3 | >= 10.0 - <= 20.0 |

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

- | | <u>CAS-No.</u> | <u>Concentration</u> [%] |
|--|----------------|--------------------------|
|--|----------------|--------------------------|

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- Aluminium sulphate 10043-01-3 >= 10.0 - <= 20.0
- Acetic acid 64-19-7 >= 5.0 - <= 10.0

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

- | | <u>CAS-No.</u> | <u>Concentration [%]</u> |
|---------------|----------------|--------------------------|
| • Acetic acid | 64-19-7 | >= 5.0 - <= 10.0 |

US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists :
See Section 2.

Canadian WHMIS Classification

E : Corrosive Material

Canadian Environmental Protection Act (CEPA)

All components of this product are on the Canadian DSL list.

SECTION 16. OTHER INFORMATION

US. HMIS Rating

Health	:	3
Flammability	:	0
Reactivity	:	0

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe)

US. NFPA 704M Rating

Health	:	2
Flammability	:	0
Reactivity	:	0

(0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme)

Agfa Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by Agfa Corporation as a customer service.

This MSDS is replacing Agfa MSDS number 079TB.008

Section(s) changed compared to the previous issue: 16

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