

**G335, PART B**

SUBID:00000008580

Version 1  
Revision Date 08-14-2007

Print Date 08-15-2007

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION****Identification of the substance/preparation**

Product name : G335, PART B  
MSDS Number : 00000008580  
Use of the Substance/Preparation : Photographic fixing concentrate  
Product code : LXW6T, LXW7V, LXW8X  
Business group : IN

**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	>= 5.0	- <= 10.0
• Acetic acid	64-19-7	>= 5.0	- <= 10.0
• Water	7732-18-5	>= 80.0	- <= 100.0

**SECTION 3. HAZARDS IDENTIFICATION**

The product as a whole has not been tested. This hazard information is for the individual ingredients.

**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. May cause skin irritation. May cause eye irritation.

**Potential Health Effects**

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

**Acute health effects****Inhalation**

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- 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**

- 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.

**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 / personel 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.

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Additional advice : Wash away residues with plenty of water.

**SECTION 7. HANDLING AND STORAGE****Handling**

Advice on protection against fire and explosion : No special protective measures against fire and explosion required.

**Storage**Advice on common storage : Store away from strong alkalis.  
Requirements for storage : Keep container tightly closed. Protect from direct sunlight. areas and containers**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Limit Values (US)**

Components	CAS-No.	Values	Type	Revision Date	Basis
Aluminium sulphate	10043-01-3	2 mg/m3	TWA	1989	OSHA Z1A
Acetic acid	64-19-7	10 ppm	TWA	2002	ACGIH
		15 ppm	STEL	2002	ACGIH
		25 mg/m3	PEL	06 1993	OSHA Z1
		25 mg/m3	TWA	1989	OSHA Z1A

**Exposure Limit Values (CA)**

Components	CAS-No.	Values	Type	Revision Date	Basis
Aluminium sulphate	10043-01-3	2 mg/m3	TWA	10 2003	CAD AB OEL
		2 mg/m3	TWA	03 2004	CAD BC OEL

**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 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.

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Emergency showers and eye wash stations should be available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Form	:	Liquid.
Colour	:	Colourless.
Odour	:	Smell of acetic acid
Vapour pressure	:	23.0 hPa at 20 °C (68 °F)
Relative density	:	1.097 at 20 °C (68 °F)
pH (25 °C, 77 °F)	:	2.1
Melting point/range	:	< 0 °C (< 32 °F)
Boiling point/range	:	> 100 °C (> 212 °F)
VOC content	:	5.2 % 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
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**

• 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
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**Acute dermal toxicity**

• Acetic acid	:	LD50 rabbit	1,060 mg/kg
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**SECTION 12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)****Biodegradation**

• Acetic acid	:	OECD 301D Assessment of biological degradability 99 % after 30 d
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**Ecotoxicity effects**

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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**

- Biochemical oxygen demand : 51,500 mg/l  
within 5 days (BOD5)
- Chemical Oxygen Demand : 72,700 mg/l  
(COD)

**SECTION 13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Environmental regulations, discharge of chemicals and washwater, waste treatment and disposal conditions of chemicals and their packaging may vary from one country to another. The relevant local regulations should be consulted. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor. 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**

Immediate Health Hazard.

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**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	>= 5.0 - <= 10.0
• 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	>= 5.0 - <= 10.0

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

	<u>CAS-No.</u>	<u>Concentration [%]</u>
• Aluminium sulphate	10043-01-3	>= 5.0 - <= 10.0
• 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**

- D2B : Toxic Material Causing Other Toxic Effects
- 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)

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**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.004

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