

G-353C Fixer Part B

SUBID:000001007378

Version 2

Print Date 04-15-2011

Revision Date 04-14-2011

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Identification of the substance/preparation

Product name : G-353C Fixer Part B
 MSDS Number : 000001007378
 Use of the Substance/Preparation : Photographic fixing concentrate
 Product code : FSE4Z
 Business group : MI

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	>= 1.0	-	<= 5.0
• Acetic acid	64-19-7	>= 1.0	-	<= 5.0
• Nonylphenol-polyethyleneglycol ether	9016-45-9	>= 1.0	-	<= 5.0
• 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.

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Potential Health Effects

- Primary Routes of Entry : Eye contact. Skin contact. Inhalation of vapours or mists. Accidental ingestion.
- Aggravated Medical Condition : 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.
- Nonylphenol-polyethyleneglycol ether : May cause respiratory tract irritation 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.
- Nonylphenol-polyethyleneglycol ether : May cause irritation resulting in reddening, drying and itching.

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.
- Nonylphenol-polyethyleneglycol ether : May be irritating to the eyes with symptoms of reddening, tearing and stinging.

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.

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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 / 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
Aluminium sulphate	10043-01-3	2 mg/m ³ 1 mg/m ³	TWA TWA	1989 2009	OSHA Z1A ACGIH
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	Basis
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				Date	
Aluminium sulphate	10043-01-3	2 mg/m3	TWA	10 2003	CAD AB OEL
		2 mg/m3	TWA	03 2004	CAD BC OEL
Acetic acid	64-19-7	2 mg/m3	TWA	12 2008	OEL (QUE)
		25 mg/m3	TWA	12 2008	OEL (QUE)
		37 mg/m3	STEL	12 2008	OEL (QUE)

Exposure controls

- Hygiene measures : 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.
- Respiratory protection : 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid.
- Colour : Colourless.
- Odour : Smell of acetic acid
- Relative density : 1.050 at 20 °C (68 °F)
- pH (25 °C, 77 °F) : 2.5
- Melting point/range : < 0 °C (< 32 °F)
- Boiling point/range : > 100 °C (> 212 °F)
- Relative vapour density : Not applicable
- Flash point : > 93.33 °C (> 199.99 °F)
Not combustible.
- VOC content : 3.3 %
34.65 g/l
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

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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

Acute oral toxicity

- Aluminium sulphate : LD50 rat > 5,000 mg/kg
- Acetic acid : LD50 rat 3,310 mg/kg
- Nonylphenol-polyethyleneglycol ether : LD50 rat 4,000 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

Other information

- Acetic acid : No data available

SECTION 12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradation

- Acetic acid : OECD 301D Assessment of biological degradability
99 % after 30 d
- Nonylphenol-polyethyleneglycol ether : OECD 302B Inherent biodegradability
75 % after 28 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
- Nonylphenol-polyethyleneglycol ether : Species: Leuciscus idus (golden orfe)
LC50: 7.5 mg/l/ 96 h

Toxicity to daphnia

- Acetic acid : Species: Daphnia magna (water flea)
EC50: 47 mg/l/ 24 h
- Nonylphenol-polyethyleneglycol ether : Species: Daphnia magna (water flea)
EC50: > 1 mg/l/ 48 h

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Toxicity to algae

- Acetic acid : Species: Scenedesmus quadricauda (algae)
EC10: 4,000 mg/l/ 8 d
- Nonylphenol-
polyethyleneglycol ether : Species: Scenedesmus subspicatus (algae)
EC50: > 1 mg/l/ 72 h

Toxicity to bacteria

- Acetic acid : Species: Pseudomonas putida (bacteria)
EC10: 2,850 mg/l/ 16 h
- Nonylphenol-
polyethyleneglycol ether : Species: Pseudomonas putida (bacteria)
EC50: > 500,000 mg/l/ 24 h

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

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.

Empty containers.

Recondition or dispose of empty container in accordance with governmental regulations.

US. RCRA Hazardous Waste Classification (40 CFR 261)

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

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. OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. SARA 311/312 Hazard Categories

Acute 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	>= 1.0	<= 5.0
Acetic acid	64-19-7	>= 1.0	<= 5.0

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	>= 1.0	<= 5.0

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	>= 1.0	<= 5.0
Acetic acid	64-19-7	>= 1.0	<= 5.0

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	>= 1.0	<= 5.0

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

Canadian WHMIS Classification

Not regulated.

Canadian Environmental Protection Act (CEPA)

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

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SECTION 16. OTHER INFORMATION**US. HMIS Rating**

Health	:	2
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 203TB.006

Section(s) changed compared to the previous issue: 9, 16

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