

SAFETY DATA SHEET

Issuing Date: 11-Mar-2015

Version 1

Autex Fixer & Replenisher

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Autex Fixer & Replenisher

Product code 23016B

Product Use X-ray processing.

Manufactured by

FUJIFILM Hunt Chemicals U.S.A., Inc.
40 Boroline Road
Allendale, NJ 07401-0320

MSDS are available at the following website(s): <http://www.fujifilmusa.com/msds>

Company Phone Number U.S.A: 800-473-3854

Emergency Telephone Transport-CHEMTREC Inside NA: 800-424-9300
Transport CHEMTREC Outside NA: 703-527-3887
Transport-CANUTEC Inside Canada: 613-996-6666
Medical Emergency (24 hour): 877-935-7387

E-mail EHS@fujifilm.com

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements

Danger

Hazard Statements

Causes severe skin burns and eye damage



Precautionary Statements**Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Response

Immediately call a POISON CENTER or doctor/physician
 IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not classified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
ACETIC ACID	64-19-7	15-30%
ALUMINUM SULFATE	10043-01-3	7-13%

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Immediate medical attention is required.
Eye contact	In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 30 minutes. Remove contaminated clothing and shoes. Call a physician immediately.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes or clothing.

Most important symptoms/effects, acute and delayed

Burning feeling and temporary redness.

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

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

None known.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products

Carbon oxides. Sulfur oxides. Sodium oxides.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge none

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Do not allow material to contaminate ground water system. Should not be released into the environment. Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

Other information Refer to protective measures listed in Sections 7 and 8.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
ACETIC ACID	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	
ALUMINUM SULFATE		(vacated) TWA: 2 mg/m ³ Al Aluminum	TWA: 2 mg/m ³ Al	

Exposure controls

Engineering Measures Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended. For environmental protection, remove and wash all contaminated protective equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Colorless	Odor	Slight, Vinegar-like
Odor Threshold	Not available	Physical State @20°C	Liquid
pH	~ 2	Molecular Weight	Not available
Specific Gravity	1.17	Autoignition temperature	Not available
Flash point	> 201 °F / > 94 °C	Boiling point / boiling range	> 212 °F / > 100 °C
Decomposition temperature	Not available	Freezing Point	Not available
Melting point / melting range	Not available		
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	Explosive Property Details	Not available
Solubility	Soluble in water	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	Not available

Vapor density	Not available	Density	Not available
VOC (lb/gal)	0	VOC (g/l)	0
Dynamic viscosity	Not available		

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Exposure to air or moisture over prolonged periods. Excessive heat. Freezing.

Incompatible Materials

Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

Inhalation

Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause additional effects as listed under "Ingestion".

Eyes

Corrosive to the eyes and may cause severe damage including blindness.

Skin

Causes burns.

Ingestion

Ingestion causes burns of the upper digestive and respiratory tracts.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
ACETIC ACID	600 mg/kg (Rabbit) [NZ CCID]	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 4 h
ALUMINUM SULFATE	> 5000 mg/kg (Rat)		

Information on toxicological effects

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation

Causes severe irritation and or burns.

Corrosivity

Corrosive to eyes. Corrosive to skin.

Sensitization

No information available.

Mutagenic Effects

No information available.

Reproductive Toxicity

No information available.

Carcinogenicity	None known.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organ Effects	Eyes, Respiratory system, Skin, Teeth.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	12625 mg/kg
ATEmix (dermal)	10147 mg/kg
ATEmix (inhalation-dust/mist)	57.8 mg/l

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ACETIC ACID		Pimephales promelas: 79 mg/L at 96 h		65: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Octonol Water Partition Coefficient (log pow)
ACETIC ACID	-0.31

Mobility

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Box, Limited Quantity, Exempt from shipping papers

TDG

Proper Shipping Name Acetic acid solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
Description UN2790, Acetic acid solution, 8, III

MEX

Proper Shipping Name Acetic acid, solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
Description UN2790, Acetic acid solution, 8, III

ICAO

Proper Shipping Name Acetic acid solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
Description UN2790, Acetic acid solution, 8, III

IATA

Proper Shipping Name Acetic acid solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
Description UN2790, Acetic acid solution, 8, III

IMDG

Proper Shipping Name Acetic acid, solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
EmS-No F-A, S-B
Description UN2790, Acetic acid, solution, 8, III, Ltd. Qty

ADR/RID

Proper Shipping Name Acetic acid solution
UN/ID No UN2790
Hazard Class 8
Packing Group III
Classification Code C3
Description UN2790, Acetic acid solution, 8, III, (E)
ADR/RID-Labels 8

ADN

Proper Shipping Name Acetic acid solution
UN/ID No UN2790
Hazard Class 8
Packing Group III

Classification Code	C3
Description	UN2790, Acetic acid solution, 8, III
Limited quantity	LQ7

15. REGULATORY INFORMATION

International Inventories

TSCA	Yes
DSL/NDSL	Yes
PICCS	Yes
EINECS/ELINCS	Yes
ENCS	No
IECSC	Yes
KECL	Yes
AICS	Yes

***Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

***No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

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

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ACETIC ACID	5000 lb			X
ALUMINUM SULFATE	5000 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ACETIC ACID	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ

ALUMINUM SULFATE	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ
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U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
ACETIC ACID	X	X	X		X
ALUMINUM SULFATE	X	X	X		

International Regulations**Canada - NDSL**

This product does not contain any NDSL chemicals.

Mexico - Grade

Slight risk, Grade 1

Mexico - Carcinogen Status and Exposure Limits

Chemical Name	Carcinogen Status	Exposure Limits
ACETIC ACID		Mexico: TWA 10 ppm Mexico: TWA 25 mg/m ³ Mexico: STEL 15 ppm Mexico: STEL 37 mg/m ³
ALUMINUM SULFATE		Mexico: TWA 2 mg/m ³

Other Regulations

No information available

16. OTHER INFORMATION

NFPA	Health Hazard 3	Flammability 1	Instability 0	Physical and chemical hazards - Personal protection C
HMIS	Health Hazard 3	Flammability 1	Physical Hazard 0	

Prepared By Environment, Health and Safety, phone: 800-473-3854

Revision Date 11-Mar-2015

Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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