

SAFETY DATA SHEET

Issuing Date: 08-May-2015

Version 1

XFH-200 Fixer Hardner

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name XFH-200 Fixer Hardner

Product code 28041

Product Use Hardener.

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
Corrosive to metals	Category 1

GHS Label elements, including precautionary statements

Danger

Hazard Statements

Causes severe skin burns and eye damage
May be corrosive to metals



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
 Keep only in original container

Response

Immediately call a POISON CENTER or doctor/physician
 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
 Absorb spillage to prevent material damage

Storage

Store locked up
 Store in corrosive resistant polyethylene container with a resistant inner liner

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-%
ALUMINUM SULFATE	10043-01-3	15-30%

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	Immediate medical attention is required. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and shoes immediately.
Eye contact	Do not rub affected area. Keep eye wide open while rinsing. In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. 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. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms/effects, acute and delayed

Causes severe skin burns and eye damage. 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.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge Yes

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. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. 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. Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
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. Protective shoes or boots.
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	When using do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. 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	none
Odor Threshold	Not available	Physical State @20°C	Liquid
pH	< 2	Molecular Weight	Not available
Specific Gravity	1.3		

Flash point	> 201 °F / > 94 °C	Autoignition temperature	Not available
Decomposition temperature	Not available	Boiling point / boiling range	> 212 °F / > 100 °C
Melting point / melting range	Not available	Freezing Point	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

Incompatible with strong acids and bases. Incompatible with oxidizing agents. Metals.

Hazardous Decomposition Products

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

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)
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 skin. Corrosive to eyes.
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.

Chronic toxicity Avoid repeated exposure.

Target Organ Effects Respiratory system, Skin, Eyes.

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) 20020 mg/kg

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants

Persistence and degradability

No information available.

Bioaccumulation

No information available

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 Limited Quantity, Exempt from shipping papers

TDG

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III

MEX

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III

ICAO

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III

IATA

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III

IMDG

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
EmS-No F-A, S-B
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III, Ltd. Qty

ADR/RID

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Classification Code C1
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III

ADN

Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s. (ALUMINUM SULFATE)
UN/ID No UN3264
Hazard Class 8
Packing Group III
Classification Code C1

Description Limited quantity	UN3264, Corrosive liquid, acidic, inorganic, n.o.s (ALUMINUM SULFATE), 8, III 5 L
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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
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
ALUMINUM SULFATE	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ

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
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
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 -
HMIS	Health Hazard 3	Flammability 1	Physical Hazard 0	Personal protection B

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

Revision Date 08-May-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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