

FIXER HARDENER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Photo Systems, Inc.

7200 Huron River Dr., Dexter, MI 48130

Product Name: **FIXER HARDENER**

Product Number: **154020, 804-0054-46**

Product Use: Hardening agent for fixers

Customer Information Phone Number:

1-734-424-9625

CHEMTREC®: 24 Hour Emergency Transport Phone Number: 1-800-424-9300

Date Reviewed: 09/01/2015

Rev. 7.0

2. HAZARDOUS IDENTIFICATION

2.1 Classification of the substance or mixture

Health hazard

Serious eye damage, (Category 1), H318

Acute aquatic toxicity (Category1), H410

Metal Corrosivity (Category 1), H290

Causes skin irritation (Category 2), H315

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: WARNING

Hazard statement(s)

H290 May be corrosive to metals.

H302 Harmful if swallowed

H315 Causes skin irritation

H318 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instruction before use.

P261 Avoid breathing mist

P264 Wash skin thoroughly after handling

P270 Do not eat, drink, or smoke when using this product

P273 Avoid release into the environment.

SAFETY DATA SHEET



P280 Wear protective gloves, eye protection
P301 + P312 IF SWALLOWED; call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL or doctor.
P501 Dispose of contents to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS</u>	<u>OHSA PEL</u>	<u>ACGIH TLV</u>	<u>Weight %</u>
ALUMINUM SULFATE	10043-01-3	N.E.	2mg/m ³ as aluminum	30-40

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids apart. After initial flushing remove contact lenses, if worn and continue flushing. Get immediate medical attention.

Inhalation: If symptomatic, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: If swallowed, DO NOT induce vomiting. Give large quantities of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Skin Contact: Immediately wash contaminated areas with plenty of soap and water for at least 15 minutes. Seek medical attention if irritation develops.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Nonflammable - Foam, water fog, carbon dioxide, or dry chemical. Use of water spray may be inefficient.

5.2 Special Hazards arising from substance or mixture

The product causes burns of eyes, skin and mucous membranes. Fire or excessive heat may cause production of hazardous decomposition products.

Combustion Products: oxides of sulfur

Unusual Fire And Explosion Hazards: Oxidizers.

5.3 Advise for firefighters

Wear self-contained NIOSH/MSHA approved positive pressure breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Review fire and explosion hazards and safety precautions before proceeding with cleanup. Use appropriate personal protective equipment. Avoid contact with skin and eyes. Stop the spillage.

Dike the spill. Prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. Neutralize with alkali such as soda ash, or lime. Adequate ventilation is required if soda

ash is used, because of the consequent release of carbon dioxide gas. Soak up with sawdust, sand, or other absorbent material. Remove non-usable solid material and/or contaminated soil for disposal in an approved and permitted landfill.

6.2 Environmental precautions

Prevent liquid from entering sewers, waterways or low areas. Discharge to sewer requires approval of permitting authority and may require pre-treatment. Contaminated surfaces should be cleaned using water.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin, eyes or clothing. Do not breathe mist. Store in a cool, dry, well-ventilated area. Keep containers closed. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

7.2 Conditions for safe storage, including any incompatibles

Do not store with incompatible materials. All labeled precautions must be observed when handling, storing and transporting empty containers due to product residues. Triple rinse before disposal. Dispose of in a licensed facility.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

See Section 3.

8.2 Exposure controls

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Exposure Guidelines: See Section 2.

Personal protective equipment

Eye Protection: Chemical safety goggles/splash shield.

Respiratory Protection: Use NIOSH/MSHA approved respirator for acid fumes or if mist may be generated.

Skin protection: Latex, rubber, or neoprene waterproof gloves are recommended.

Body protection: Rubber or plastic apron.

Ventilation protection: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance And Odor: Colorless, odorless liquid.

Solubility In Water: Complete
Boiling Point: >100° C
Flash Point: Nonflammable
Pounds Per Gallon: 9.90
Ph: 2.6-2.9
Specific Gravity: 1.19 g /ml
Melting Point: Not applicable
Freezing Point: Not established
Evaporation Rate: Not established
Vapor Density: Not established
Percent Volatile: 68.22
Molecular Weight: Not applicable
Vapor Pressure: 18 mm Hg @ 20°
V.O.C.is 0.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Alkalis and water reactive materials such as oleum, cause exothermic reactions.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

High temperature, sparks, open flames,

10.5 Incompatible Materials

Avoid contact with strong acids, bases. Incompatible with oxidizing agents.

10.6 Decomposition Products

At temperatures above, can release sulfur oxides gases.

11. TOXICOLOGICAL INFORMATION

11.1 Information of toxicological effects

Component information

Aluminum Sulfate 10043-01-3

Acute toxicity:

Oral: LD50 (rats): 1930 mg/kg
Dermal: No data available
Inhalation: No data available

Skin irritation: No data available

Eye irritation: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: None

Reproductive toxicity: No adverse reproductive effects are anticipated.

Specific Target Organ toxicity – No data available

12. ECOLOGICAL INFORMATION

Component information

Aluminum Sulfate 10043-01-3

12.1 Toxicity

Harmful to aquatic life at low concentrations.

Toxicity to fish LC50 – fish – 100 mg/l – 96h

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Result of PBT and vPvB assessment

Assessment not available as chemical assessment not required/not conducted

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

The preferred options for disposal are to send to licensed recyclers, or to approved incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

14. TRANSPORT INFORMATION

DOT (US)

DOT Class: NOT REGULATED

15. REGULATORY INFORMATION

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:
None

SARA 313 Components

None

SARA 311/312 Hazards

Acute Health Hazard

California Prop 65 Components

None

TSCA

All ingredients in this finished product are listed on the EPA TSCA INVENTORY.

SCAQMD Rule 443.1

Photochemically Reactive: No
Maximum Grams of VOC per Liter: 0
Vapor Pressure: 18 mm Hg@ 20 Degrees C

16. OTHER INFORMATION

Full text of H-statements referred to under sections 2 and 3.

Serious eye damage, (Category 1), H318
Acute aquatic toxicity (Category1), H410
Metal Corrosivity (Category 1), H290
Causes skin irritation (Category 2), H315

HMIS RATING

Health: 2
Chronic Health Hazard *
Flammability: 0
Reactivity: 0

OTHER ADDITIONAL INFORMATION: The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.