

# FREESTYLE PHOTOGRAPHIC SUPPLIES LEGACYPRO® LIQUID FIXER SOLUTION

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Distributor: Freestyle Photographic Supplies

5124 Sunset Blvd., Hollywood, CA 90027

Product Name: **LIQUID FIXER SOLUTION**

Product Number: **10198**

**Product Use:** Photographic fixer

**Customer Information Phone Number:**

1-800-292-6137

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

Date Reviewed: 05/27/2020

Version: 3.0

## 2. HAZARDOUS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Health hazard

Causes eye irritation (Category 2B), H320

Causes skin irritation (Category 2), H314

### 2.2 GHS Label elements, including precautionary statements

#### Pictogram



**Signal Word: WARNING**

#### Hazard statement(s)

H305 May be harmful if swallowed and enters airways/

H314 Causes skin irritation

H317 May cause allergic skin reaction

H320 Causes eye irritation

H335 May cause respiratory irritation

#### Precautionary statement(s)

P261 Avoid breathing mist

P264 Wash skin thoroughly after handling

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

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

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P321 Specific treatment (see supplemental first aid instructions on this label).  
 P330 Rinse mouth.  
 P333 +P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse  
 P391 Collect spillage  
 P501 Dispose of contents to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OHSA PEL	ACGIH TLV	Weight %
AMMONIUM THIOSULFATE	7783-18-8	N.E.	N.E.	30-40
SODIUM SULFITE	7757-83-7	N.E.	5 mg/m <sup>3</sup>	1-5
ACETIC ACID	64-19-7	25mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	1-3
BORIC ACID	10043-35-3	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	1-3
ALUMINUM SULFATE	10043-01-3	N.E.	N.E.	1-3

### 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. DO NOT remove contact lenses, if worn. 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:** Seek medical attention or contact a poison control center for advice about whether to induce vomiting. If conscious, give two glasses of water. If individual is drowsy or unconscious, do not give anything by mouth. Place individual on left side with head down.

**Skin Contact:** Flush skin with plenty of water and wash with a non-alkaline skin cleaner. Wash contaminated clothes before reuse. Get medical attention if irritation develops.

**Aggravated Medical Conditions:** Skin contact may aggravate an existing dermatitis.

### 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

Nonflammable -Use agent appropriate for surrounding fire.

#### 5.2 Special Hazards arising from substance or mixture

Fire or excessive heat may cause production of hazardous decomposition products.  
 Combustion Products: Carbon dioxide, carbon monoxide, and oxides of sulfur and nitrogen.

#### 5.3 Advise for firefighters

Wear self-contained breathing NIOSH/MSHA approved 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. For small amounts less than one gallon flush to the sewer with large amounts of water. For larger spills, prevent liquid from entering sewers, waterways or low areas. Absorb spillage in inert material. 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

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.

#### Personal protective equipment

**Eye Protection:** Safety glasses with side shields (or goggles).

**Respiratory Protection:** When this product is used in the intended way, no respiratory protection is anticipated to be necessary.

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

**Body protection:** Rubber or plastic apron.

**Ventilation protection:** Local exhaust ventilation is recommended. Ventilation must be adequate to keep hazardous ingredients below their exposure limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance And Odor: Clear slightly yellow liquid with ammonia odor.  
Solubility In Water: Complete  
Boiling Point: >100° C  
Flash Point: Nonflammable  
Vapor Pressure: 18mm Hg @ 20° C  
Ph: 5.0  
Specific Gravity: 1.23 g/ml  
Melting Point: Not applicable  
Freezing Point: Not established  
Evaporation Rate: Not established  
Vapor Density: 0.6  
Percent Volatile: 64.1  
Molecular Weight: Not applicable  
Pounds Per Gallon: 10.2  
V.O.C. is 30.2 g/L or 2.4 % or 0.25 lb. /gal.

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical stability

Conditions To Avoid: None

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible Materials

Strong acids will liberate sulfur dioxide. Strong bases of sodium hydroxide will liberate ammonia fumes.

### 10.6 Decomposition Products

May produce oxides of sulfur and ammonia.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information of toxicological effects

#### Component information

#### ***Ammonium thiosulfate 7783-18-8***

#### **Acute toxicity:**

Oral: LD50 (rats): 2,890 mg/kg

Dermal: No data  
Inhalation: No data  
**Skin irritation:** Rabbit  
Non irritant  
**Eye irritation:** Rabbit  
No eye irritation (OECD Test Guideline 405).  
**Carcinogenicity/mutagenicity:** none

**Sodium Sulfite 7757-83-7****Acute toxicity:**

Oral LD-50 (rat) 3, 560 mg/kg  
Inhalation LC-50 (rabbit) >5.500 mg/kg - 4 h

Dermal: no data available

**Skin irritation:** Rabbit No skin irritation

**Eye irritation:** Rabbit Mild eye irritation

**Respiratory or Skin Sensitization** Prolonged or repeated exposure may cause allergic skin  
Reaction in certain sensitive individuals.

**Carcinogenicity/mutagenicity:** none

**Acetic Acid 64-19-7****Acute toxicity:**

Oral: LD50 (rats): 3,310 mg/kg

Dermal: LD50 (Rabbit) – 4h – 11.4 mg/l

Inhalation: LC50 (Mouse) – 1h – 5620 ppm  
LC50 (Rat) – 4h -11.4 mg/l

**Skin irritation:** No data available

**Eye irritation:** Rabbit  
Corrosive to eyes

**Respiratory or skin sensitization** No data available

**Carcinogenicity/mutagenicity:** none

**Reproductive toxicity:** No data available

**Specific target organ toxicity – repeated exposure –** No data available

**Aspiration hazard -** No data available

**Boric Acid 10043-35-3****Acute toxicity:**

Oral: LD50 (rats): 2,660 mg/kg

Dermal: No data

Inhalation: No data

**Skin irritation:** No data available

**Eye irritation:** No data available

**Respiratory sensitization:** No data available

**Carcinogenicity/mutagenicity:** none

## 12. ECOLOGICAL INFORMATION

### Component information

#### ***Ammonium thiosulfate 7783-18-8***

##### **12.1 Toxicity**

Toxicity to fish	LC0-Lepomis macrochirus (bluegill) - 510 mg/l – 96h
Toxicity to daphnia and other aquatic invertebrates	LC50 – Daphnia magna (Water flea) – 230 mg/l – 21d
Toxicity to algae	EC50 – Pseudokirchneriella subcapitata - > 100 mg/l – 72 h (OECD Test Guideline 201).
Toxicity to bacteria	Respiration inhibition EC50 – Sludge Treatment - > 1,000 mg/l – 3h (OECD Test Guideline 201).

##### **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

#### ***Sodium Sulfite 7757-83-7***

##### **12.1 Toxicity**

Toxicity to fish	LC- Gambusia affinis (Mosquito fish) – 660 mg/l – 96h
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##### **12.2 Persistence and degradability**

No data available

##### **12.3 Bioaccumulative potential**

No data available

##### **12.4 Mobility in soil**

No data available

#### ***Acetic Acid 64-19-7***

##### **12.1 Toxicity**

Toxicity to fish	LC0- Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l – 96h (OECD Test Guideline 203).
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Toxicity to daphnia and  
other aquatic invertebrates

LC50 – Daphnia magna (Water flea) – > 300.82mg/l – 48h  
(OECD Test Guideline 202).

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

Biodegradability

aerobic – exposure time 30d  
Result: 99% - Readily biodegradable

Biochemical Oxygen  
Demand (BOD)

880 mg/g

### 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

### 12.5 Other adverse effects

No data available.

## ***Boric Acid 10043-35-3***

### 12.1 Toxicity

Toxicity to fish  
Toxicity to daphnia and  
other aquatic invertebrates

LC0-Lepomis macrochirus (bluegill) – 1,021 mg/l – 96h  
LC50 – Daphnia magna (Water flea) –53.2 mg/l – 21d

### 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

Preferred options for disposal are to send to licensed reclaimers, or to permitted 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)**

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**

The following components are subject to reporting levels established by SARA Title III, Section 313:  
None

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**California Prop 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**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: 30.2 g/L

Vapor Pressure: Not established

**16. OTHER INFORMATION****Full text of H-statements referred to under sections 2 and 3.**

H305	May be harmful if swallowed and enters airways (Category 2)
H314	Causes skin irritation (Category 2)
H317	May cause allergic skin reaction (Category 1)
H320	Causes eye irritation (Category 2B)
H335	May cause respiratory irritation (Category 3)

**HMIS RATING**

Health: 1

Flammability: 0

Reactivity: 0

Protective: C



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.