

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.11.2015

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## Patterson Fixer Solution

### SECTION 1: Identification of the substance/mixture and of the supplier

**Product name:** Patterson Fixer Solution  
**Manufacturer/Supplier Trade name:** Patterson Peri Fixer Solution  
**Manufacturer/Supplier Article number:** 070911990, 070911958  
**Recommended uses of the product and restrictions on use:** Photographic Solution

**Manufacturer Details:**

Patterson Companies, Inc.  
1031 Mendota Heights Road  
St. Paul, MN 55120

**Supplier Details:**

Patterson Dental Supply, Inc.  
1031 Mendota Heights Road  
St. Paul, MN 55120

**Emergency telephone number:**

ChemTrec Inc.  
1-800-424-9300  
703-527-3887 (CHEMTREC)

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



Irritant

Skin Irritation - Category 2.

Eye Irritation - Category 2.

**Signal word:** Warning

**Hazard statements:**

Causes skin irritation.  
Causes eye irritation.

**Precautionary statements:**

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Wash skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with soap and water.  
If skin irritation occurs: 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 eye irritation persists get medical advice/attention.  
Specific treatment (see supplemental first aid instructions on this label).  
Store in a well ventilated place. Keep container tightly closed.  
Dispose of contents and container as instructed in Section 13.

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Other Non-GHS Classification: None

**SECTION 3: Composition/information on ingredients**

Ingredients:		
CAS 7732-18-5	Water	85 %
CAS 7732-18-8	Ammonium thiosulfate	15 %
CAS 7757-83-7	Sodium Sulfite	3 %
CAS 64-19-7	Acetic acid	2 %
Percentages are by weight		

**SECTION 4: First aid measures**

**Description of first aid measures**

**After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. Get medical assistance if cough or other symptoms appear.

**After skin contact:**

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

**After eye contact:**

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:**

Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists.

**Most important symptoms and effects, both acute and delayed:**

Irritation.

**Indication of any immediate medical attention and special treatment needed:**

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

**SECTION 5: Firefighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**Unsuitable extinguishing agents:**

None identified.

**Special hazards arising from the substance or mixture:**

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

**Advice for firefighters:**

**Protective equipment:**

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Use NIOSH-approved respiratory

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#### General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

### SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Blue liquid	Explosion limit lower:	Not applicable
		Explosion limit upper:	Not applicable
Odor:	Not Determined	Vapor pressure at 20°C:	< 17 mm Hg
Odor threshold:	Not Determined	Vapor density:	0.6 mm Hg
pH-value:	4.40	Relative density:	Not Determined
Melting/Freezing point:	> 32°F	Solubilities:	Complete (20°C)
Boiling point/Boiling range:	> 212°F	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid, gaseous):	Not flammable	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density at 20°C:	1.085 g/mL		
Percent volatile (by volume)	85-90%		

### SECTION 10: Stability and reactivity

#### Reactivity:

Nonreactive under normal conditions.

#### Chemical stability:

Stable under normal conditions.

#### Possible hazardous reactions:

Mixing with developer will cause ammonia gas. This will dissipate quickly as pH is neutralized.

#### Conditions to avoid:

Incompatible materials.

#### Incompatible materials:

Strong acids, bases, and heat.

#### Hazardous decomposition products:

Not determined.

### SECTION 11: Toxicological information

#### Acute Toxicity:

##### Oral:

64-19-7 LD50 Rat 3310 mg/kg (Source: JAPAN\_GHS)

##### Dermal:

64-19-7 LD50 Rabbit 1060 mg/kg (Source: JAPAN\_GHS)

##### Inhalation:

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protection/breathing apparatus.

#### Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

#### Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

#### Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations.

Reference to other sections: None

### SECTION 7: Handling and storage

#### Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

#### Conditions for safe storage, including any incompatibilities:

Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

### SECTION 8: Exposure controls/personal protection



#### Control Parameters:

64-19-7, Acetic Acid, OSHA: 10 ppm TWA; 25 mg/m<sup>3</sup> TWA.  
64-19-7, Acetic Acid, ACGIH TLV: 15 ppm STEL, 10 ppm TWA.  
64-19-7, Acetic Acid, NIOSH: 50 ppm IDLH. 15 ppm STEL, 10 ppm TWA.

#### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

#### Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

#### Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

#### Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

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**Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

**Non Bulk:**

**RQ (if applicable):** None

**Proper shipping Name:** Not Regulated.

**Hazard Class:** None

**Packing Group:** Not Regulated.

**Marine Pollutant (if applicable):** No additional information.

**Comments:** None

### SECTION 15: Regulatory information

#### United States (USA)

**SARA Section 311/312 (Specific toxic chemical listings):**

Acute

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

64-19-7 Acetic Acid 5000 Lbs.

7783-18-5 Ammonium thiosulfate 5000 Lbs.

#### Proposition 65 (California):

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

#### Canada

**Canadian Domestic Substances List (DSL):**

All ingredients are listed.

### SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information

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64-19-7 LC50 Rat 11.4 mg/L 4 h (Source: NLM\_CIP)

**Chronic Toxicity:** No additional information.

**Skin corrosion/irritation:** No additional information.

**Serious eye damage/irritation:**

[Grant, W.M. Toxicology of the Eye, 3rd ed. Springfield, IL: Charles C. Thomas Publisher, 1986., p. 40] \*\*PEER REVIEWED\*\* The vapor of acetic acid is irritating to the eyes and nose, causing lacrimation and hyperemia.

[Mackison, F. W., R. S. Stricoff, and L. J. Partridge, Jr. (eds.). NIOSH/OSHA - Occupational Health Guidelines for Chemical Hazards. DHHS(NIOSH) Publication No. 81-123 (3 VOLS). Washington, DC: U.S. Government Printing Office, Jan. 1981., p. 2] \*\*PEER REVIEWED\*\* Acetic Acid - Eye irritation has been noted at a concentration below 10 ppm.

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:** See section 15.

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.

**STOT-single and repeated exposure:** No additional information.

**Additional toxicological information:** No additional information.

### SECTION 12: Ecological information

**Ecotoxicity:**

64-19-7: 96 Hr LC50 Pimephales promelas: 79 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 75 mg/L [static]

64-19-7: 48 Hr EC50 Daphnia magna: 65 mg/L [Static]

**Persistence and degradability:**

Not determined.

**Bioaccumulative potential:**

Not determined.

**Mobility in soil:**

Not determined.

**Other adverse effects:**

None identified.

### SECTION 13: Disposal considerations

**Waste disposal recommendations:**

Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11).

### SECTION 14: Transport information

**US DOT**

**UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

**Limited Quantity Exception:**

None

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contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 1-0-0

**HMIS:** 1-0-0

**GHS Full Text Phrases:** None

#### Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.  
PNEC Predicted No-Effect Concentration (REACH).  
CFR Code of Federal Regulations (USA).  
SARA Superfund Amendments and Reauthorization Act (USA).  
RCRA Resource Conservation and Recovery Act (USA).  
TSCA Toxic Substances Control Act (USA).  
NPRI National Pollutant Release Inventory (Canada).  
DOT US Department of Transportation.  
IATA International Air Transport Association.  
GHS Globally Harmonized System of Classification and Labelling of Chemicals.  
ACGIH American Conference of Governmental Industrial Hygienists.  
CAS Chemical Abstracts Service (division of the American Chemical Society).  
NFPA National Fire Protection Association (USA).  
HMIS Hazardous Materials Identification System (USA).  
WHMIS Workplace Hazardous Materials Information System (Canada).  
DNEL Derived No-Effect Level (REACH).

**Effective date:** 02.11.2015

**Last updated:** 08.21.2015

