



Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200 Standard must be
Consulted for specific requirements

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Identity (as used on label and list) TF-4 Rapid Fixer (A trade secret formula)	Note: Blank spaces are permitted, if any item is not applicable, or no Information is available, the space must be marked to indicate that.
Section I	
Manufacturer's Name: Photographer's Formulary, Inc.	Emergency Telephone Number: 800-424-9300
Address (Number Street, City, State and Zip): Po Box 950 Condon MT 59826	Telephone Number for Information: 406-754-2891 / 800-922-5255
	Date Prepared: October 14, 2006

Section II – Hazardous Ingredients/Identity Information

Hazardous components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits	% Optional
Mixture of four (4) chemical compounds in solution. This mixture is a trade secret formula. The Hazards for chemicals not named here are stated elsewhere on this sheet.				
Chemical 1	not established			+/- 4%
Chemical 2	not established			+/- 8%
Chemical 3	not established			+/- 4%
Ammonium Thiosulfate 58% (NH ₄) ₂ S ₂ O ₃	For ammonia is 25 ppm			+/- 84%

Section III – Physical/Chemical Characteristics:

Boiling Point:	Boils with decomposition	Specific Gravity:	1.32
Vapor Pressure: (mm Hg)	N/A	Melting Point	Ph 8+
Vapor Density (AIR=1)	N/A	Evaporation Rate (Butyl Acetate =1)	N/A
Solubility in Water: 100%			
Appearance and Order: Clear and colorless with very slight odor if any			

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) Non	Flammable Limits	LEL: N/A	UEL: N/A
Extinguishing Media: Water			
Special Fire Fighting Procedures: Keep container cool with water spray			
Unusual Fire and Explosion Hazards: None			

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid: Heat accelerates the evolution of ammonia
	Stable	X	

Incompatibility (Materials to Avoid)

Hazardous Polymerization	May Occur		Conditions to Avoid: Strong oxidizers, water reactive materials such as oilum, acids, alkalides
	Will Not Occur	X	Byproducts: Oxidizers-nitrates and nitrates explosion. Acids cause sulfur dioxide, alkalis

Section VI – Health Hazard Data

Route(s) of Entry: Eyes	Inhalation: Yes	Skin: Slight	Ingestion: Yes
Health Hazards (Acute and Chronic): Inhalation may irritate respiratory tract, ingestion may irritate Gastrointestinal tract, slight skin irritation from prolonged or repeated contact. Eyes, irritation or burning from contact with liquid.			
Carcinogenicity: No	NTP: No	IASC Monographs: NO	OSHA Regulated: Yes
Signs and symptoms of Exposure: Inhalation: coughing, Ingestion: Stomach pains, Skin: Reddish spots			
Eyes: Red eyes and burning			
Medical Conditions Generally: To a person sensitive to ammonia if heated they could have troubling Aggravated by Exposure: breathing.			
Emergency and First Aid Procedures: Eyes: Flush with water for 15 mins. Skin: wash with plenty of Water. Inhalation: Remove to fresh air, extra attention if ammonia is present.			

Section VII – Precautions for safe Handling and Use:

Steps to be taken in case Material IS Released or Spilled: A hazardous Substance yes, if so reportable quantity 8630 of 58% solution.
Waste Disposal Method: Flush to sewer with plenty of water if permitted by local disposal regulations
Precautions to be Taken in Handling And Storing: Store in a cool, well ventilated area away from acids Alkalis and oxidizers keep containers out of sun.
Other Precautions: Follow Drum- Handling instructions on label, Label sign CAUTION!

Section VIII – Control Measures

Respiratory Protection (Specify Type) none generally, if misty conditions prevail, wear a mist respirator		
Ventilation	Local Exhaust: Yes	Special: No
	Mechanical: Ok	Other: No
Protective Gloves: Rubber Gloves		Eye Protection: Safety Goggles
Other Protective Clothing or Equipment: Rubber Apron		
Work/ Hygienic Practices: use normal personal hygiene and housekeeping		