

Kodak



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 09/14/2004  
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Version 1.20

## Section 1 - Product and Company Information

Product Name: Kodak® Processing chemicals for autoradiography films, GBX fixer/replenisher  
Product Number: P7167  
Brand: Sigma Chemical

Company: Sigma-Aldrich  
Street Address: 3050 Spruce Street  
City, State, Zip, Country: SAINT LOUIS, MO 63103 US  
Technical Phone: 314 771 5765  
Fax: 800 325 5052  
Emergency Phone: 414 273 3850 Ext. 5996

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
PROCESSING CHEMICALS, KODAK GBX FIXER AND REPLENISHER	None	No		
Ingredient Name	CAS #	Percent	SARA 313	
WATER	7732-18-5	>= 50.000 % <= 55.000 %	No	
AMMONIUM THIOSULFATE	7783-18-8	>= 30.000 % <= 35.000 %		
SODIUM ACETATE, ANHYDROUS	127-09-3	>= 1.000 % <= 5.000 %	No	
SODIUM BISULFITE	7631-90-5	>= 1.000 % <= 5.000 %		
Ammonium sulfite solution 34 %, pure	10196-04-0	>= 1.000 % <= 5.000 %		
Formula				
Synonyms				

## Section 3 - Hazards Identification

## Emergency Overview

Harmful.  
Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.  
Possible sensitizer.

HMIS Rating  
Health: 1 Flammability: 0 Reactivity: 0

NFPA Rating  
Health: 1 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## Immediate Treatment - Work Site

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

## Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

## Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

## Eye Exposure

Assure adequate flushing of the eyes by separating the eyelids with fingers.

## Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

## Extinguishing Media

## Suitable

Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

## Firefighting

## Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## Specific Hazard(s)

Emits toxic fumes under fire conditions.

## Exposure Hazard(s)

## Material

Irritant. Harmful liquid. Possible sensitizer.

## Section 6 - Accidental Release Measures

## Procedure to be Followed In Case of Leak or Spill

Evacuate area.

## Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

## Methods for Cleaning Up

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

## Section 7 - Handling and Storage

## Handling

## User Exposure

Do not breathe vapor. Do not get in eyes, on skin, on clothing.

**Storage**  
**Suitable**  
Keep tightly closed. Store in a cool dry place.

## Section 8 - Exposure Controls / PPE

**Engineering Controls**  
Safety shower and eye bath. Use only in a chemical fume hood.

**Personal Protective Equipment**  
**Other**  
Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

**General Hygiene Measures**  
Wash thoroughly after handling. Wash contaminated clothing before reuse.

## Section 9 - Physical/Chemical Properties

Appearance	Physical State	Color	Odor
	Liquid	Colorless	Ammonia odor

**Molecular Weight:** N/A

pH	N/A	
BP/BP Range	> 100 °C	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	18 mmHg	20 °C
Vapor Density	0.6 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	1.283 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	50 - 55 %	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	N/A	
Flash Point °C	N/A	
Explosion Limits	N/A	

**Flammability** N/A  
**Autoignition Temp** N/A

**Solubility**  
**Solubility in Water:** Soluble.

N/A = not available

## Section 10 - Stability and Reactivity

**Stability**  
**Materials to Avoid**  
Strong oxidizing agents.

**Hazardous Decomposition Products**  
**Hazardous Decomposition Products**  
Carbon monoxide, Carbon dioxide.

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

## Section 11 - Toxicological Information

**Route of Exposure**  
**Skin Contact**  
Causes skin irritation.  
**Skin Absorption**  
Harmful if absorbed through skin.  
**Eye Contact**  
Causes eye irritation.  
**Inhalation**  
Harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
**Ingestion**  
Harmful if swallowed.

**Sensitization**  
**Sensitization**  
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Signs and Symptoms of Exposure**  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**RTECS Number:** N/A

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

**Appropriate Method of Disposal of Substance or Preparation**  
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

**DOT**  
**Proper Shipping Name:** None  
**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**  
**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

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## Section 15 - Regulatory Information

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### EU Additional Classification

**Symbol of Danger:** Xn

**Indication of Danger**

Harmful.

**Risk Statements** R: 20/21/22 36/37/38

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

**Safety Statements** S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### US Classification and Label Text

**Indication of Danger**

Harmful.

**Risk Statements**

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

**Safety Statements**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**US Statements**

Possible sensitizer.

### United States Regulatory Information

**SARA Listed:** No

### Canada Regulatory Information

**WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

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## Section 16 - Other Information

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### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.