

ILFORD PHOTO HARMAN technology Ltd

MATERIAL SAFETY DATA SHEET

Hypam Fixer

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	Hypam Fixer
PRODUCT NO.	1758285
INTERNAL ID	10005
PRODUCT USE	Fixer Solution
SUPPLIER	Distributors USA: WYNIT Inc, 5801 East Taft Road, North Syracuse, NY 13212. Tel: 1 800 GO WYNIT (469 9648) or 1 315 437 4167, Fax: 1 315 437 0432 Canada: Amplis Foto Inc, 22 Telson Road, Markham, Ontario L3R 1E5, Tel: 905 477 4111, Fax: 905 477 2502
CONTACT PERSON	USA: ilfordhelp@wynit.com; Canada: terry.bevens@amplis.com
EMERGENCY TELEPHONE	USA/Canada: For medical emergency, call 1 800 842 9660 (Product Misuse); For transportation emergency call CHEMTREC 1 800 424 9300
CONTAINER SIZE	5 Liter
CONTAINER SIZE	

2 HAZARDS IDENTIFICATION

May irritate eyes.

POTENTIAL HEALTH EFFECTS

INHALATION

No specific health warnings noted.

INGESTION

No specific health warnings noted.

SKIN CONTACT

No specific health warnings noted.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

No specific health warnings noted.

Spray and vapor in the eyes may cause irritation and smarting.

ROUTE OF ENTRY

Ingestion. Skin and/or eye contact.

MEDICAL CONSIDERATIONS

May aggravate existing: Pre-existing eye problems.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Hypam Fixer

Name	EC No.	CAS-No.	Weight
Ammonium Thiosulphate	231-982-0	7783-18-8	36-50
Boric Acid	233-139-2	10043-35-3	1-5%
SODIUM METABISULPHITE	231-673-0	7681-57-4	1-5%
Water	231-791-2	7732-18-5	36-50

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink a few glasses of water or milk. DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Contact physician if irritation continues.

EYE CONTACT

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

The product is non-combustible. Use extinguishing media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapors.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS

The product is non-combustible. If heated, harmful vapors may be formed.

PROTECTIVE MEASURES IN FIRE

Use protective equipment appropriate for surrounding materials. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Avoid contact with skin and eyes. Provide adequate ventilation. For personal protection, see section 8.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

SPILL CLEAN UP METHODS

For waste disposal, see section 13. Wear necessary protective equipment. Small quantities may be flushed to drains with plenty of water. Absorb in vermiculite, dry sand or earth and place into containers. Wash contaminated area with water. Prevent discharge of larger quantity to drain.

7 HANDLING AND STORAGE

HANDLING

Provide good ventilation. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Read and follow manufacturer's recommendations.

STORAGE

Store in closed original container in a dry place. Store above freezing. Store under well-ventilated conditions at a temperature below 25°C.

STORAGE CLASS

Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Hypam Fixer

PROCESS CONDITIONS

Provide eyewash station and it is recommended that a safety shower is also available.

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. Must not be handled in confined space without sufficient ventilation.

RESPIRATORY EQUIPMENT

Respiratory protection not required.

HAND PROTECTION

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness ≥ 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min) or neoprene (thickness ≥ 0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex.

EYE PROTECTION

Use approved safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOR	Yellow Green		
ODOR	Slightly pungent odor		
SOLUBILITY	Soluble in water. 100%		
BOILING POINT (°C)	>100 760 mm Hg	MELTING POINT (°C)	<0
RELATIVE DENSITY	1.34 20	VAPOR PRESSURE	- Not Known
EVAPORATION RATE	1 H ₂ O (water)=1	pH-VALUE, CONC. SOLUTION	5.1

10 STABILITY AND REACTIVITY

STABILITY

Stable under the prescribed storage conditions. No particular stability concerns.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Avoid contact with acids and alkalis.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong acids. Strong alkalis. Avoid contact with other photographic solutions and/or cleaning compounds.

HAZARDOUS DECOMPOSITION PRODUCTS

When heated, toxic and corrosive vapours/gases may be formed. Irritating gases/vapors/fumes of: Ammonia or amines. Sulfur dioxide.

11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION

This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Name	ACETIC ACID ...%
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Name	SODIUM METABISULPHITE
Toxic Dose 1 - LD 50	1540 mg/kg (oral rat)
Name	Ammonium Thiosulphate
Toxic Dose 1 - LD 50	2890 mg/kg (oral rat)

Hypam Fixer

Name	Boric Acid
Toxic Dose 1 - LD 50	>3000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

Name	ACETIC ACID ...%
LC 50, 96 hrs, Fish mg/l	>100
Name	SODIUM METABISULPHITE
LC 50, 96 hrs, Fish mg/l	>150
EC 50, 48 hrs, Daphnia, mg/l	89
IC 50, 72 hrs, Algae, mg/l	48
Name	Boric Acid
LC 50, 96 hrs, Fish mg/l	600
EC 50, 48 hrs, Daphnia, mg/l	115-153

13 DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT

The disposal process for this product when it becomes waste, depends largely upon how much (volume) waste is generated, where the waste is generated (location) and by whom (whether in a professional or amateur or other capacity). Therefore only outline guidance can be provided. For detailed guidance and advice on the disposal of this product when it becomes waste, please visit the COPPICE web site at <http://www.pic.uk.net/coppice/index.htm>. The information is relevant to both professional and amateur users.

DISPOSAL METHODS

Used, diluted, and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pre-treated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to be handled by a licensed hazardous waste contractor.

14 TRANSPORT INFORMATION

TRANSPORT NOTES	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).
ROAD TRANSPORT NOTES	Not classified for road transport
RAIL TRANSPORT NOTES	Not classified for rail transport
SEA TRANSPORT NOTES	Not classified for sea transport
AIR TRANSPORT NOTES	Not classified for air transport

15 REGULATORY INFORMATION

REGULATORY STATUS (US)

TSCA: The ingredients of this product are on the TSCA Inventory.

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY

Not Classified
According to
WHMIS.

Hypam Fixer

CONTROLLED PRODUCT CLASSIFICATION

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33)) This product has been classified according to the hazard criteria of the Controlled Product Regulations, and the MSDS contains all required information.

16 OTHER INFORMATION

GENERAL INFORMATION

HARMAN technology Ltd believe the information and recommendations contained herein are based on correct and factual data. However, no express or implied guarantee or warranty of any kind is made with respect to this information. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to ensure the proper use and disposal of this product and the health and safety of employees and customers.

INFORMATION SOURCES

European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984.

ISSUED BY

HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechology.com

REVISION DATE 11/26/2010

VERSION No. 4

SAFETY DATA SHEET

HYPAM FIXER 1+4

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME HYPAM FIXER 1+4

PRODUCT NO. IP94328-1+4

APPLICATION Photographic Fixer Solution

CONTACT PERSON HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com

2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
Boric Acid	233-139-2	10043-35-3	< 1	Repr. Cat. 2;R60,R61.
SODIUM METABISULPHITE	231-673-0	7681-57-4	1-5%	Xn;R22 Xi;R41 R31

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

INGESTION

Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

SKIN CONTACT

Rinse with water.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS

Fire creates: Irritating gases/vapours/fumes of Ammonia or amines.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Do not contaminate water sources or sewer. Absorb in vermiculite, dry sand or earth and place into containers. Contain Spill. Use large quantities of water to flush small spills to sanitary sewer if local regulations permit. Do not flush to septic tank. See Section 13 for disposal considerations. Flush with plenty of water to clean spillage area. Prevent discharge of larger quantity to drain.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Read and follow manufacturer's recommendations. Provide good ventilation.

STORAGE PRECAUTIONS

Store in tightly closed original container in a dry and cool place. Keep in original container.

HYPAM FIXER 1+4

STORAGE CLASS

Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
SODIUM METABISULPHITE	WEL		5 mg/m3			

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS

Provide eyewash station and it is recommended that a safety shower is also available.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. Must not be handled in confined space without sufficient ventilation. It is recommended that general room ventilation should provide for 10 - 15 room air changes per hour.

RESPIRATORY EQUIPMENT

Not relevant.

HAND PROTECTION

Use protective gloves made of: Neoprene, nitrile, polyethylene Butyl rubber. Use thin cotton gloves inside the rubber gloves if allergy risk.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid Water-soluble		
COLOUR	Yellow Green		
ODOUR	Slight odour		
SOLUBILITY	Soluble in water.		
BOILING POINT (°C)	>100 760 mm Hg	MELTING POINT (°C)	<0
RELATIVE DENSITY	1.345 20	VAPOUR PRESSURE	- Not Known
EVAPORATION RATE	1 H ₂ O (water)=1	pH-VALUE, CONC. SOLUTION	5.1
pH-VALUE, DILUTED SOLUTION	5.1 - 5.2		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Avoid contact with acids and alkalis.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Avoid contact with other photographic solutions and/or cleaning compounds.

HAZARDOUS DECOMPOSITION PRODUCTS

Irritating gases/vapours/fumes of: Ammonia or amines. Sulphur dioxide.

11 TOXICOLOGICAL INFORMATION

HYPAM FIXER 1+4**TOXICOLOGICAL INFORMATION**

This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

INHALATION

No specific health warnings noted.

INGESTION

No specific health warnings noted.

SKIN CONTACT

No specific health warnings noted.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

No specific health warnings noted.

Spray and vapour in the eyes may cause irritation and smarting.

ROUTE OF ENTRY

Ingestion. Skin and/or eye contact.

MEDICAL CONSIDERATIONS

May aggravate existing: Pre-existing eye problems.

Name	SODIUM METABISULPHITE
Toxic Dose 1 - LD 50	1540 mg/kg (oral rat)
Name	Boric Acid
Toxic Dose 1 - LD 50	>3000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

Not regarded as dangerous for the environment.

Name	SODIUM METABISULPHITE
LC 50, 96 Hrs, FISH mg/l	>150
EC 50, 48 Hrs, DAPHNIA, mg/l	89
IC 50, 72 Hrs, ALGAE, mg/l	48
Name	Boric Acid
LC 50, 96 Hrs, FISH mg/l	600
EC 50, 48 Hrs, DAPHNIA, mg/l	115-153

13 DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

Used, diluted, and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pre-treated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to be handled by a licensed hazardous waste contractor. EU Waste Number: 090104

14 TRANSPORT INFORMATION

	No transport warning sign required.
ROAD TRANSPORT NOTES	Not classified for road transport
RAIL TRANSPORT NOTES	Not classified for rail transport
SEA TRANSPORT NOTES	Not classified for sea transport
AIR TRANSPORT NOTES	Not classified for air transport
ADR CLASS	Not classified for transportation.

15 REGULATORY INFORMATION**RISK PHRASES**

NC Not classified.

HYPAM FIXER 1+4

SAFETY PHRASES

P13

Safety data sheet available for professional user on request.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

16 OTHER INFORMATION

GENERAL INFORMATION

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INFORMATION SOURCES

European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984.

ISSUED BY

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REVISION DATE 11/08/2010

REV. NO./REPL. SDS 2

GENERATED

SAFETY DATA SHEET STATUS

Approved.

RISK PHRASES IN FULL

R31	Contact with acids liberates toxic gas.
R22	Harmful if swallowed.
R61	May cause harm to the unborn child.
R60	May impair fertility.
R41	Risk of serious damage to eyes.