ILFORD PHOTO

HARMAN technology Ltd

MATERIAL SAFETY DATA SHEET

HARMAN Toner Selenium

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME HARMAN Toner Selenium

PRODUCT NO. 10303

INTERNAL ID TS-MONO-41 (IP060309/13)

PRODUCT USEToning solution for monochrome prints

SUPPLIER Distributors

USA: WYNIT Inc, 6847 Ellicot Drive, East Syracuse, NY 13057. Tel: 315 437 1086, Fax: 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

2 HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

INHALATION

May cause irritation to the respiratory system.

INGESTION

Toxic if swallowed.

SKIN CONTACT

Harmful in contact with skin. May cause skin irritation/eczema May cause sensitization by skin contact.

EYE CONTACT

Ammonia Irritating to eyes. May cause severe irritation to eyes.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Weight
Ammonium Thiosulphate	231-982-0	7783-18-8	10-30%
SODIUM SELENITE	233-267-9	10102-18-8	1-5%
Water	231-791-2	7732-18-5	50-70%

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink a few glasses of water or milk. Provide rest, warmth and fresh air. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.

SKIN CONTACT

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

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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

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.

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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. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

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 Clear liquid
COLOR Colorless
ODOR Ammonia

SOLUBILITY 100% Soluble in water

BOILING POINT (°C) >100 760 mm Hg RELATIVE DENSITY 1.29 20

pH-VALUE, CONC. SOLUTION 8.8

10 STABILITY AND REACTIVITY

STABILITY

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

CONDITIONS TO AVOID

Avoid contact with acids and alkalies. Avoid mixing with: Strong alkalis. Generates toxic gas in contact with acid.

HAZARDOUS POLYMERISATION

Will not polymerize.

MATERIALS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures may form toxic and corrosive vapors. Ammonia Sulphurous gases (SOx).

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.

NameSODIUM SELENITEToxic Dose 1 - LD 507 mg/kg (oral rat)NameAmmonium ThiosulphateToxic Dose 1 - LD 502890 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

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. The UK's Photo Imaging Council (PIC) has produced detailed guidance in a Code of Practice for the Photoprocessing Industry for the Care of the Environment (COPPICE). For up to date, general and specialist 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

Unused 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 handled by a licensed hazardous waste contractor.

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WASTE CLASS

EU Waste Number: 090101

14 TRANSPORT INFORMATION

TRANSPORT NOTES

This product is not classified as dangerous for transport by road, rail sea or air, (ADR/RID, IMDG, IATA). The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15 REGULATORY INFORMATION

REGULATORY STATUS (US)

TSCA: The ingredients of this product are on the TSCA Inventory. This Product is Hazardous under the OSHA Hazard Communication Standard.

REGULATORY REFERENCES

29 CFR 1910.1010 Federal Regulations (OSHA Standard).

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM -WHMIS

LABEL(S) FOR SUPPLY



Materials
Causing Other
Toxic Effects.

CONTROLLED PRODUCT CLASSIFICATION

Canadian WHMIS D2B This Product has been classified according to the hazard criteria of the Controlled Products 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

ISSUED BY

Dr R Fielding, HARMAN technology Ltd, Mobberley, Knutsford, Cheshire, WA16 7JL, ENGLAND. Tel. +44 (0)1565 650000; email: ross.fielding@harmantechnology.com

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