

# ILFORD PHOTO

## HARMAN technology Ltd

### SAFETY DATA SHEET

#### HARMAN Selenium Toner 1+3

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

This SDS relates to the product after it has been prepared for use in accordance with our recommendations. Because HARMAN technology Ltd. does not supply the solution ready for use, we are not obliged to provide this SDS. However, we do so in order to help users to use the product safely and assess correctly the risks involved. Users should also have and refer to the SDS(s) for the concentrate(s) from which the working strength solution is prepared.

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Product name HARMAN Selenium Toner 1+3  
Internal identification 10330

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Toning solution for monochrome prints

##### 1.3. Details of the supplier of the safety data sheet

###### Supplier

HARMAN technology Ltd  
Ilford Way  
Mobberley  
Knutsford  
Cheshire WA16 7JL  
<http://www.harmantechnology.com>  
Tel: +44(0)1565 650000  
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[trevor.rhodes@harmantechnology.com](mailto:trevor.rhodes@harmantechnology.com)

##### 1.4. Emergency telephone number

Emergency telephone See Safety Data Sheet of appropriate concentrate for details.

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

Physical hazards Not Classified  
Health hazards Acute Tox. 4 - H302  
Environmental hazards Not Classified

##### 2.2. Label elements

###### Pictogram



Signal word Warning

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<b>Hazard statements</b>	H302 Harmful if swallowed. EUH208 Contains SODIUM SELENITE. May produce an allergic reaction.
<b>Precautionary statements</b>	P102 Keep out of reach of children. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P330 Rinse mouth. P501 Dispose of contents/ container in accordance with local regulations. P280 Wear protective clothing, gloves, eye and face protection.
<b>Supplemental label information</b>	EUH031 Contact with acids liberates toxic gas.
<b>Contains</b>	SODIUM SELENITE

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>Ammonium Thiosulphate</b> <span style="float: right;"><b>5-10%</b></span>		
CAS number: 7783-18-8	EC number: 231-982-0	REACH registration number: 01-2119537325-41-XXXX
<b>Classification</b> Not Classified	<b>Classification (67/548/EEC or 1999/45/EC)</b> -	
<b>SODIUM SELENITE</b> <span style="float: right;"><b>&lt; 0.5 %</b></span>		
CAS number: 10102-18-8	EC number: 233-267-9	
<b>Classification</b> Acute Tox. 2 - H300 Acute Tox. 3 - H331 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> T+;R28 T;R23 R43 R31 N;R51/53	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Unlikely route of exposure as the product does not contain volatile substances.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Skin contact</b>	Rinse immediately with plenty of water.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

### 4.2. Most important symptoms and effects, both acute and delayed

<b>Inhalation</b>	No specific symptoms known.
<b>Ingestion</b>	No specific symptoms known.

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**Skin contact** May cause skin sensitisation or allergic reactions in sensitive individuals.

**Eye contact** May cause irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor** No specific recommendations.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** No unusual fire or explosion hazards noted.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Selenium Oxides of: Selenium Sulphur. Nitrogen.

### 5.3. Advice for firefighters

**Protective actions during firefighting** No specific firefighting precautions known.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin and eyes.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep out of reach of children.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

**SODIUM SELENITE**

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Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL

as Se

WEL = Workplace Exposure Limit

### Ammonium Thiosulphate (CAS: 7783-18-8)

**DNEL**

General population - Inhalation; Long term systemic effects: 104 mg/m<sup>3</sup>

**PNEC**

- Fresh water; 0.78 mg/l  
- Marine water; 0.08 mg/l

### 8.2. Exposure controls

#### Protective equipment



**Appropriate engineering controls**

Provide adequate ventilation. This product must not be handled in a confined space without adequate ventilation.

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

**Hand protection**

Use protective gloves.

**Other skin and body protection**

Wear suitable protective clothing as protection against splashing or contamination.

**Respiratory protection**

Respiratory protection not required.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Slight pungent.
<b>pH</b>	pH (diluted solution): 8.7 (made up to 1+3)
<b>Initial boiling point and range</b>	100°C @ 760 mm Hg
<b>Relative density</b>	~ 1.07 @ 20°C
<b>Solubility(ies)</b>	Soluble in water.

### 9.2. Other information

**Other information** Not available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

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**Possibility of hazardous reactions** Under normal conditions of storage and use, no hazardous reactions will occur.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with acids. Avoid contact with other photographic solutions and/or cleaning compounds.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Selenium Oxides of: Selenium Sulphur. Nitrogen.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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

#### Acute toxicity - oral

**ATE oral (mg/kg)** 1,521.74

#### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 152,173.91

**ATE inhalation (vapours mg/l)** 652.17

**ATE inhalation (dusts/mists mg/l)** 108.7

**Inhalation** May cause respiratory system irritation.

**Ingestion** Harmful if swallowed. May cause discomfort if swallowed.

**Skin contact** May cause sensitisation by skin contact.

**Eye contact** Irritation of eyes and mucous membranes.

**Acute and chronic health hazards** Vapour or spray in the eyes may cause irritation and smarting. May cause allergy. May cause hypersensitivity.

**Route of entry** Skin and/or eye contact Ingestion.

### SODIUM SELENITE

#### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 7.0

**Species** Rat

**ATE oral (mg/kg)** 7.0

#### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 700.0

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ATE inhalation (vapours mg/l) 3.0

ATE inhalation (dusts/mists mg/l) 0.5

### SECTION 12: Ecological Information

#### 12.1. Toxicity

**Toxicity** The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment. At the levels that are present, the product is not considered to be hazardous to the environment.

#### SODIUM SELENITE

Acute toxicity - fish LC<sub>50</sub>, 96 hours: <10 mg/l, Algae

Acute toxicity - aquatic invertebrates LC<sub>50</sub>, 48 hours: 7.9 mg/l, Daphnia magna

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

**Other adverse effects** None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**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.

**Waste class** 090199

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**Road transport notes** Not classified for road transport

**Rail transport notes** Not classified for rail transport

**Sea transport notes** Not classified for sea transport

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**Air transport notes** Not classified for air transport

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

#### **Transport labels**

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

#### **Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **EU legislation**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.

#### **Guidance**

Workplace Exposure Limits EH40.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture. See SUMI (Safe Use of Mixtures Information document) attached to Safety Data Sheet of appropriate concentrate.

## SECTION 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.

## HARMAN Selenium Toner 1+3

<b>Key literature references and sources for data</b>	Material Safety Data Sheet, Misc. manufacturers.
<b>Issued by</b>	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com
<b>Revision date</b>	17/08/2017
<b>Revision</b>	2
<b>Supersedes date</b>	15/10/2015
<b>Hazard statements in full</b>	H300 Fatal if swallowed. H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H331 Toxic if inhaled. H411 Toxic to aquatic life with long lasting effects. EUH208 Contains SODIUM SELENITE. May produce an allergic reaction.