

# SAFETY DATA SHEET

## Phenisol Developer 1+4

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### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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#### 1.1. Product identifier

Product name Phenisol Developer 1+4  
Internal Id 10147

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

Identified uses Photographic Developer Solution

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

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

#### 1.4. Emergency telephone number

See msds of appropriate concentrate for details.

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### SECTION 2: HAZARDS IDENTIFICATION

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

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

Physical and Chemical Hazards Not classified.  
Human health Skin Sens. 1 - H317;Muta. 2 - H341;Carc. 2 - H351  
Environment Not classified.

##### Classification (1999/45/EEC)

Carc. Cat. 3;R40, Muta Cat. 3;R68. R43.

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

#### 2.2. Label elements

Contains HYDROQUINONE

Label In Accordance With (EC) No. 1272/2008



Signal Word Warning

##### Hazard Statements

H317 May cause an allergic skin reaction.  
H341 Suspected of causing genetic defects.  
H351 Suspected of causing cancer.

##### Precautionary Statements

P280 Wear protective clothing, gloves, eye and face protection.  
P302+352 IF ON SKIN: Wash with plenty of soap and water.  
P332+313 If skin irritation occurs: Get medical advice/attention.

#### 2.3. Other hazards

No information available.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

<b>HYDROQUINONE</b>		<b>1 - 2 %</b>
<b>CAS-No.: 123-31-9</b>	<b>EC No.: 204-617-8</b>	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Aquatic Acute 1 - H400	Classification (67/548/EEC) Carc. Cat. 3;R40 Muta. Cat. 3;R68 Xn;R22 R43 Xi;R41 N;R50	
<b>SODIUM HYDROXIDE</b>		<b>&lt; 0.02 %</b>
<b>CAS-No.: 1310-73-2</b>	<b>EC No.: 215-185-5</b>	
Classification (EC 1272/2008) Skin Corr. 1A - H314	Classification (67/548/EEC) C;R35	

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

#### General information

No recommendation given, but first aid may still be required in case of accidental exposure. If in doubt, get medical attention!

#### Inhalation

Unlikely route of exposure as the product does not contain volatile substances.

#### Ingestion

Rinse mouth thoroughly.

#### Skin contact

Rinse immediately with plenty of 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. Get medical attention if any discomfort continues.

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

#### Inhalation

No specific symptoms noted.

#### Ingestion

No specific symptoms noted.

#### Skin contact

May cause sensitisation by skin contact.

#### Eye contact

May cause temporary eye irritation.

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

No specific first aid measures noted.

## SECTION 5: FIREFIGHTING MEASURES

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## **5.1. Extinguishing media**

### **Extinguishing media**

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

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

### **Unusual Fire & Explosion Hazards**

No unusual fire or explosion hazards noted.

### **Specific hazards**

Fire creates: Irritating gases/vapours/fumes of: Sulphur dioxide.

## **5.3. Advice for firefighters**

### **Special Fire Fighting Procedures**

No specific fire fighting procedure given.

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

Avoid discharge into drains.

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

Wear necessary protective equipment. 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. Do not let washing down water contaminate ponds or waterways. Inform Authorities if large amounts are involved.

### **6.4. Reference to other sections**

For waste disposal, see section 13.

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## **SECTION 7: HANDLING AND STORAGE**

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### **7.1. Precautions for safe handling**

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

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

No special storage precautions noted.

### **Storage Class**

Chemical storage.

### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

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## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
HYDROQUINONE	WEL		0,5 mg/m3			
SODIUM HYDROXIDE	WEL				2 mg/m3	

WEL = Workplace Exposure Limit.

### **8.2. Exposure controls**

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## Protective equipment



## Engineering measures

Provide adequate ventilation. Must not be handled in confined space without sufficient ventilation.

## Respiratory equipment

Respiratory protection not required.

## Hand protection

Use protective gloves.

## Eye protection

Use eye protection.

## Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

<b>Appearance</b>	Liquid Water-soluble.
<b>Colour</b>	Colourless to pale yellow.
<b>Odour</b>	No characteristic odour.
<b>Solubility</b>	Soluble in water.
<b>Initial boiling point and boiling range (°C)</b>	>100 760 mm Hg
<b>Melting point (°C)</b>	<0
<b>Relative density</b>	1.1 20
<b>Vapour pressure</b>	- Not Known
<b>Evaporation rate</b>	1 H <sub>2</sub> O (water)=1
<b>pH-Value, Diluted Solution</b>	10.6 - 10.7

### 9.2. Other information

Not available.

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## SECTION 10: STABILITY AND REACTIVITY

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### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions.

### 10.3. Possibility of hazardous reactions

#### **Hazardous Polymerisation**

Will not polymerise.

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

#### **Materials To Avoid**

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

### 10.6. Hazardous decomposition products

Irritating gases/vapours/fumes of: Sulphur dioxide.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1. Information on toxicological effects

#### **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 that comprise the mixture.

#### **Other Health Effects**

Hydroquinone: Carcinogen Category 3. Mutagen Category 3. ACGIH A3 IARC 3 IARC Animal Carcinogen List. IARC Int. Agency for Cancer Research.

#### **Ingestion**

Harmful if swallowed.

#### **Skin contact**

May cause sensitisation by skin contact.

#### **Eye contact**

Irritation of eyes and mucous membranes. Repeated exposure may cause chronic eye irritation.

#### **Health Warnings**

May cause allergy. May cause hypersensitivity.

#### **Route of entry**

Skin and/or eye contact.

#### Toxicological information on ingredients.

#### HYDROQUINONE (CAS: 123-31-9)

##### **Toxic Dose 1 - LD 50**

320 mg/kg (oral rat)

##### **Toxic Dose 2 - LD 50**

>900 mg/kg (skn-rat)

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## SECTION 12: ECOLOGICAL INFORMATION

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#### **Ecotoxicity**

The product contains a substance which is very toxic to aquatic organisms.

### 12.1. Toxicity

#### Ecological information on ingredients.

#### HYDROQUINONE (CAS: 123-31-9)

##### **LC 50, 96 Hrs, Fish mg/l**

0.10-0.18 (Fathead Minnow)

##### **EC 50, 48 Hrs, Daphnia, mg/l**

0.05

##### **IC 50, 72 Hrs, Algae, mg/l**

1.0

### 12.2. Persistence and degradability

#### **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

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## **Mobility:**

The product is soluble in water.

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

This product does not contain any PBT or vPvB substances.

## **12.6. Other adverse effects**

None known.

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## **SECTION 13: DISPOSAL CONSIDERATIONS**

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### **13.1. Waste treatment 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: 090101

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## **SECTION 14: TRANSPORT INFORMATION**

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<b>Road Transport Notes</b>	Not classified for road transport
<b>Rail Transport Notes</b>	Not classified for rail transport
<b>Sea Transport Notes</b>	Not classified for sea transport
<b>Air Transport Notes</b>	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)**

<b>ADR/RID/ADN Class</b>	Not classified for transportation.
<b>Transport Labels</b>	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 MARPOL73/78 and the IBC Code**

Not applicable.

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## **SECTION 15: REGULATORY INFORMATION**

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

#### **Approved Code Of Practice**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

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## Guidance Notes

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

## EU Legislation

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

## 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

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## SECTION 16: OTHER INFORMATION

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### 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.

**Revision Date** 07/10/2015

**Revision** 6

**Supersedes date** 17/09/2012

**Safety Data Sheet Status** Approved.

### Risk Phrases In Full

R35	Causes severe burns.
R22	Harmful if swallowed.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R68	Possible risk of irreversible effects.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.

### Hazard Statements In Full

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.