

**Multigrade Paper Developer**

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758 and SI 2020/1577

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product Name Multigrade Paper Developer  
(Contains: 1,4-dihydroxybenzenehydroquinonequinol)  
Product code 1918555, 1155073, 1757855

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

Identified Use(s) Photographic Developer Solution  
Uses Advised Against Not known.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer  
Company Identification HARMAN Technology Ltd  
Address of Manufacturer Ilford Way  
Mobberley  
Knutsford  
Cheshire East  
Postal code WA16 7JL  
Telephone: +44(0)1565 650000  
Fax +44(0)1565 872734  
E-mail web-admin@harmantechnology.com  
Office hours

Supplier  
Company Identification HARMAN Technology Ltd  
Address of Supplier Ilford Way  
Mobberley  
Knutsford  
Cheshire East  
Postal code WA16 7JL  
Telephone: +44(0)1565 650000  
Fax +44(0)1565 872734  
E-mail web-admin@harmantechnology.com  
Office hours

**1.4 Emergency telephone number**

National response centre  
Address NHS Direct  
Emergency Phone No. +44 111

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567  
Skin Sens. 1B :May cause an allergic skin reaction.  
Eye Irrit. 2 :Causes serious eye irritation.  
Muta. 2 :Suspected of causing genetic defects.  
Carc. 2 :Suspected of causing cancer.  
Aquatic Chronic 3 :Harmful to aquatic life with long lasting effects.

**2.2 Label elements**

According to GB CLP Regulations, UK SI 2019/720 and UK SI 2020/1567  
Product Name Multigrade Paper Developer  
(Contains: 1,4-dihydroxybenzenehydroquinonequinol)

Hazard Pictogram(s)



GHS08



GHS07

Signal Word(s)

Warning

Hazard Statement(s)

H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H341: Suspected of causing genetic defects.  
H351: Suspected of causing cancer.  
H412: Harmful to aquatic life with long lasting effects.

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## Precautionary Statement(s)

P101: If medical advice is needed, have product container or label at hand.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352: IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 P405: Store locked up.  
 P501: Dispose of contents in accordance with local, state or national legislation.

**2.3 Other hazards**

This product contains: 95-14-7 (Endocrine disrupting properties)

**2.4 Additional Information**

For full text of H/P Statements see section 16.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Not applicable.

**3.2 Mixtures**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / Registration number(s)	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Water	7732-18-5	231-791-2	73.5138	Not classified	None
Sodium sulphite	7757-83-7	231-821-4	10-30%	Not classified	None
Potassium carbonate	584-08-7	209-529-3	5-10%	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335	GHS07
pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate	140-01-2	205-391-3	<3%	Acute Tox. 4 H332 Repr. 2 H361 STOT RE 2 H373	GHS08 GHS07
1,4-dihydroxybenzenehydroquinonequinol	123-31-9	204-617-8	<2.5%	Acute Tox. 4 H302 Skin Sens. 1B H317 Eye Dam. 1 H318 Muta. 2 H341 Carc. 2 H351 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS05 GHS08 GHS07 GHS09
sodium hydroxidecaustic soda	1310-73-2	215-185-5	<1%	Met. Corr. 1 H290 Skin Corr. 1A H314 Eye Dam. 1 H318	GHS05
4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one	13047-13-7	235-920-3	<1%	Acute Tox. 4 H302	GHS07

For full text of H/P Statements see section 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

Inhalation IF exposed or concerned: Get medical advice/attention.  
 Skin Contact Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Medical Advice on this label). IF exposed or concerned:  
 Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If eye irritation persists:  
 Ingestion IF exposed or concerned: Get medical advice/attention.

**4.2 Most important symptoms and effects, both acute and delayed**

May cause irritation. Allergic contact dermatitis.

**4.3 Indication of any immediate medical attention and special treatment needed**

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Specific treatment (see Medical Advice on this label). IF exposed or concerned: Get medical advice/attention. If medical advice is needed, have product container or label at hand. Treat symptomatically.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable Extinguishing media As appropriate for surrounding fire.  
Unsuitable extinguishing media None.

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

May decompose in a fire, giving off toxic and irritant vapours.

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Ensure full personal protection (including respiratory protection) during removal of spillages.

**6.2 Environmental precautions**

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

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

Adsorb spillages onto sand, earth or any suitable adsorbent material. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

**6.4 Reference to other sections**

See Also Section 8, 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

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

Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

**7.3 Specific end use(s)**

Photographic Developer Solution

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.1 Occupational Exposure Limits**

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTTEL (8 hr TWA ppm)	LTTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Hydroquinone	123-31-9		0.5			
Sodium hydroxide	1310-73-2				2	

Region United Kingdom Source UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark Notes

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment

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Eye Protection

Wear eye protection with side protection (EN ISO 16321-1).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection

Normally no personal respiratory protection is necessary.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Liquid.
	Colour : Not known.
Odour	Not known.
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not known.
Flash Point	Not known.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

None anticipated.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

Not known.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**Multigrade Paper Developer****SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 18554.25
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 387.64
Skin corrosion/irritation	Calculation method : Causes mild skin irritation.
Serious eye damage/irritation	Calculation method : Causes serious eye irritation.
Skin sensitization data	Calculation method : May cause an allergic skin reaction.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Suspected of causing genetic defects.
Carcinogenicity	Calculation method : Suspected of causing cancer.
Reproductive toxicity	Calculation method : Not classified.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

**11.2 Other information**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

**12.2 Persistence and degradability**

Not known.

**12.3 Bioaccumulative potential**

Not known.

**12.4 Mobility in soil**

Not known.

**12.5 Results of PBT and vPvB assessment****12.6 Other adverse effects**

Listed in: List II: Substances under evaluation for endocrine disruption under an EU legislation 95-14-7 (Environment)

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

**13.2 Additional Information**

Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORT INFORMATION**

Not classified as hazardous for transport.

**14.1 UN number**

Not applicable

**14.2 UN proper shipping name**

Not applicable

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing group**

Not applicable

**14.5 Environmental hazards**

Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

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Not known

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not known

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

United Kingdom Regulations - Authorisations and/or Restrictions On Use

UK REACH Candidate List of Substances Not listed

of Very High Concern for Authorisation

UK REACH Authorisation List (Annex

XIV) list of substances subject to

authorisation

UK REACH Restrictions List (Annex XVII) Reproductive toxicants: Category 1 B (140-01-2), Potassium carbonate (584-08-7),

Restrictions on the manufacture, placing 1,4-dihydroxybenzenehydroquinonequinol (123-31-9), 4-(hydroxymethyl)-4-methyl-

on the market and use of certain 1-phenylpyrazolidin-3-one (13047-13-7), Potassium bromide (7758-02-3),

dangerous substances, mixtures and Benzotriazole (95-14-7), sodium hydroxidecaustic soda (1310-73-2)

articles

UK REACH Rolling Action Plan (RAP) Not listed

The Persistent Organic Pollutants Not listed

Regulations 2007 (SI 2007/3106) as

amended

The Ozone-Depleting Substances and Not listed

Fluorinated Greenhouse Gases

(Amendment etc.) (EU Exit) Regulations

2019 (SI 2019/583)

The Prior Informed Consent (PIC) Not listed

Regulations concerning the export and

import of hazardous chemicals

SI2008/2108 as amended

European Regulations - Authorisations and/or Restrictions On Use

Community Rolling Action Plan (CoRAP) Hydroquinone (123-31-9), Benzotriazole (95-14-7)

**15.2 Chemical Safety Assessment**

United Kingdom

A REACH chemical safety assessment has not been carried out.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s)



GHS08



GHS07

GHS05: GHS: Corrosion

GHS09: GHS: Environment

Hazard classification

Met. Corr. 1 : Substance or mixture corrosive to metals, Category 1

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1A : Skin corrosion/irritation, Category 1A

Skin Irrit. 2 : Skin corrosion/irritation, Category 2

Skin Sens. 1B : Skin sensitization, Category 1B

Eye Dam. 1 : Serious eye damage/irritation, Category 1

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

Acute Tox. 4 : Acute toxicity, Category 4

STOT SE 3 : Specific target organ toxicity — single exposure, Category 3

Muta. 2 : Germ cell mutagenicity, Category 2

Carc. 2 : Carcinogenicity, Category 2

Repr. 2 : Reproductive toxicity, Category 2

STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2

Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1

Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1

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Aquatic Chronic 3 : Hazardous to the aquatic environment, Chronic, Category 3

Hazard Statement(s)	<p>H290: May be corrosive to metals.  H302: Harmful if swallowed.  H314: Causes severe skin burns and eye damage.  H315: Causes skin irritation.  H317: May cause an allergic skin reaction.  H318: Causes serious eye damage.  H319: Causes serious eye irritation.  H332: Harmful if inhaled.  H335: May cause respiratory irritation.  H341: Suspected of causing genetic defects.  H351: Suspected of causing cancer.  H361: Suspected of damaging fertility or the unborn child.  H373: May cause damage to organs through prolonged or repeated exposure.  H400: Very toxic to aquatic life.  H410: Very toxic to aquatic life with long lasting effects.  H412: Harmful to aquatic life with long lasting effects.</p>
Precautionary Statement(s)	<p>P101: If medical advice is needed, have product container or label at hand.  P201: Obtain special instructions before use.  P202: Do not handle until all safety precautions have been read and understood.  P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  P264: Wash hands and exposed skin thoroughly after handling.  P272: Contaminated work clothing should not be allowed out of the workplace.  P273: Avoid release to the environment.  P280: Wear protective gloves/protective clothing/eye protection/face protection.  P302+P352: IF ON SKIN: Wash with plenty of water.  P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P308+P313: IF exposed or concerned: Get medical advice/attention.  P321: Specific treatment (see Medical Advice on this label).  P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  P337+P313: If eye irritation persists: Get medical advice/attention.  P362+P364: Take off contaminated clothing and wash it before reuse.  P405: Store locked up.  P501: Dispose of contents in accordance with local, state or national legislation.</p>
Acronyms	<p>ATE : Acute Toxicity Estimate  CAS : Chemical Abstracts Service  DNEL : Derived No Effect Level  EC : European Community  EINECS : European Inventory of Existing Commercial Chemical Substances  LTEL : Long term exposure limit  PBT : Persistent, Bioaccumulative and Toxic  PNEC : Predicted No Effect Concentration  REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals  STEL : Short term exposure limit  STOT : Specific Target Organ Toxicity  vPvB : very Persistent and very Bioaccumulative</p>
Key literature references and sources for data used to compile the SDS	GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567
Training Advice	Regular safety training as appropriate
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