

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.02.2015






Version 1

Revision: 04.02.2015

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

- **1.1 Product identifier**
- **Trade name: DE Developer**
2 x 5 litres dose
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
To this day we do not have any information about the identified use at the moment. These data are available we will add these to the safety data sheet.
- **Application of the substance / the mixture**
Photochemicals
Photographic developer
Developer for X-ray films
Reserved for industrial and professional use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Distributed by: Distribuido por:
Distribue par: Vertrieb durch
DE Healthcare Products
Gillingham ME8 0SB UK
UK 01634878750
Fax +44 (0) 1634 87 87 51
- **Informing department:**
UK 01634878750
Fax +44 (0) 1634 87 87 51
email: info@cybertechbrand.com
- **1.4 Emergency telephone number:**
Emergency No.: Chemtrec US (800) 424-9300
International: 001 703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
-  GHS08
 Muta. 2 H341 Suspected of causing genetic defects.
 Carc. 2 H351 Suspected of causing cancer.
-  GHS05
 Eye Dam. 1 H318 Causes serious eye damage.
-  GHS07
 Skin Sens. 1 H317 May cause an allergic skin reaction.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  Xn; Harmful
 R40-68: Limited evidence of a carcinogenic effect. Possible risk of irreversible effects.
-  Xi; Sensitising
 R43: May cause sensitisation by skin contact.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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- **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS05 GHS07 GHS08

- **Signal word** Danger

- **Hazard-determining components of labelling:**

1,4-dihydroxybenzene (hydroquinone)
 disodium disulphite

- **Hazard statements**

H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H341 Suspected of causing genetic defects.
 H351 Suspected of causing cancer.

- **Precautionary statements**

P280 Wear protective gloves / eye protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 123-31-9 EINECS: 204-617-8 Index number: 604-005-00-4 Reg.nr.: 01-2119524016-51-xxxx	1,4-dihydroxybenzene (hydroquinone) Xn R22-40-68 Xi R41 Xi R43 N R50 Carc. Cat. 3, Muta. Cat. 3 Muta. 2, H341; Carc. 2, H351 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302; Skin Sens. 1, H317	0.5-2.0%
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CAS: 497-19-8 EINECS: 207-838-8 Index number: 011-005-00-2 Reg.nr.: 01-2119485498-19-xxxx	sodium carbonate  Xi R36  Eye Irrit. 2, H319	0.5-2.0%
CAS: 111-30-8 EINECS: 203-856-5 Index number: 605-022-00-X Reg.nr.: 01-2119455549-26-xxxx	glutaral  T R23/25  C R34  Xn R42/43  N R50  Acute Tox. 3, H301; Acute Tox. 3, H331  Resp. Sens. 1, H334  Skin Corr. 1B, H314  Aquatic Acute 1, H400  Skin Sens. 1, H317	< 0.5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information**
Personal protection for the First Aider.
Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact**
Rinse opened eye for several minutes under running water (at least 15 minutes).
Remove contact lenses, if present and easy to do.
Use eye protection.
Call a doctor immediately.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire
Carbon monoxide
sulphur dioxide (SO₂)

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- **5.3 Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
At formation of toxic gases:
Put on breathing apparatus.
- **Additional information** The product is not flammable

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Do not handle until all safety precautions have been read and understood.
- **Information about protection against explosions and fires:**
No special measures required.
The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Keep container tightly sealed.
- **Information about storage in one common storage facility:**
Store away from oxidising agents.
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store in a cool place.
- **Recommended storage temperature:** 5-25 °C
- **Storage class**
LGK 12
(German Technical Rule for Hazardous Substance – TRGS 510)
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

123-31-9 1,4-dihydroxybenzene (hydroquinone)	
WEL	Long-term value: 0.5 mg/m ³

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111-30-8 glutaral

WEL	Short-term value: 0.2 mg/m ³ , 0.05 ppm
	Long-term value: 0.2 mg/m ³ , 0.05 ppm
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 The usual precautionary measures should be adhered to general rules for handling chemicals.
 Keep away from foodstuffs, beverages and food.
 Take off immediately all contaminated clothing.
 Wash contaminated clothing before reuse.
 Wash hands during breaks and at the end of the work.
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**
 Protective gloves.
 The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.
 This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.
 Only use chemical-protective gloves with CE-labelling of category III.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**

	Thickness (mm)	Breakthrough time (min)
Nitril rubber	0,38	> 480
Neoprene	0,65	> 240
Butyl rubber	0,36	> 480

Avoid natural rubber gloves.
- **As protection from splashes gloves made of the following materials are suitable:**
 Synthetic gloves
 Value for permeation: Level:
 ≥ 3 (60 min)
- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	Colourless Clear
- **Odour:** Not characteristic
- **pH-value at 25 °C:** 10.15
- **Change in condition**

Melting point/Melting range:	Not determined
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Boiling point/Boiling range:	> 100 °C
· Flash point:	Not applicable
· Self-inflammability:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive.
· Critical values for explosion:	
Oxidising properties	None
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C	1.078 g/cm ³
· Solubility in / Miscibility with Water:	miscible
· Viscosity: dynamic:	Not determined
· Solvent separation test	Not determined
· Solvent content:	
Organic solvents:	0.0 %
Water:	~ 90 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong acids
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

123-31-9 1,4-dihydroxybenzene (hydroquinone)

Oral	LD50	320 mg/kg (rat)
Dermal	LD50	>900 mg/kg (rat)

7681-57-4 disodium disulphite

Oral	LD50	3200 mg/kg (rat)
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497-19-8 sodium carbonate

Oral	LD50	4000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** mild irritant
- **on the eye:** Strong irritant with the danger of severe eye injury.

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- **Additional toxicological information:**

At present there are no animal experimental data.

This statement was deduced from the properties of the single components.

Hydroquinone has been included in the German "TRGS 905" (Technical Rules for Dangerous Substances/Index of carcinogen and mutagen substances or substances dangerous to reproductive systems), and has been classified as "Category 3" of carcinogen and mutagen substances (3 = category of lowest dangerousness). The according EU committees have not yet evaluated this classification.

- **Sensitisation** May cause sensitisation by skin contact.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Limited evidence of a carcinogenic effect.

Possible risk of irreversible effects.

Muta. 2, Carc. 2

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

123-31-9 1,4-dihydroxybenzene (hydroquinone)

EC50/48 h | 0.29 mg/l (Daphnia magna)

IC50/72 h | 0.335 mg/l (Selenastrum capricornutum)

LC50/96 h | 0.044 mg/l (Pimephales promelas)

7681-57-4 disodium disulphite

EC50/48 h | 89 mg/l (Daphnia magna)

LC50/96 h | 32 mg/l (Lepomis macrochirus)

497-19-8 sodium carbonate

LC50/96 h | 300 mg/l (Lepomis macrochirus)

- **12.2 Persistence and degradability** Not determined

- **12.3 Bioaccumulative potential** Not determined

- **Behaviour in environmental systems:** Not determined

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:** No further relevant information available.

- **Behaviour in sewage processing plants:** Not determined

- **Additional ecological information:**

- **General notes:**

At present there are no ecotoxicological assessments.

This statement was deduced from the properties of the single components.

Water hazard class 2 (German Regulation) (Self-assessment): Water-endangering.

Do not allow product to reach ground water, water bodies or sewage system.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

- **European waste catalogue**

09 01 01*	water-based developer and activator solutions
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- **Uncleaned packagings:**

- **Recommendation:**

Non contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, ADN, IMDG, IATA** Void

- **14.2 UN proper shipping name**

- **ADR, ADN, IMDG, IATA** Void

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- **Class** Void

- **14.4 Packing group**

- **ADR, IMDG, IATA** Void

- **14.5 Environmental hazards:**

Not applicable.

- **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.

- **Transport/Additional information:**

Not dangerous according to the above specifications.

- **UN "Model Regulation":**

-

SECTION 15: Regulatory information

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

- **National regulations**

- **Information about limitation of use:**

Employment restrictions concerning pregnant and lactating women must be observed.

Class	Share in %
I	1.7

- **Water hazard class:** Water hazard class 2 (Self-assessment): water-endangering.

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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H301 Toxic if swallowed.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H331 Toxic if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H341 Suspected of causing genetic defects.
 H351 Suspected of causing cancer.
 H400 Very toxic to aquatic life.

R22 Harmful if swallowed.
 R23/25 Toxic by inhalation and if swallowed.
 R34 Causes burns.
 R36 Irritating to eyes.
 R40 Limited evidence of a carcinogenic effect.
 R41 Risk of serious damage to eyes.
 R42/43 May cause sensitisation by inhalation and skin contact.
 R43 May cause sensitisation by skin contact.
 R50 Very toxic to aquatic organisms.
 R68 Possible risk of irreversible effects.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 Acute Tox. 3: Acute toxicity, Hazard Category 3
 Acute Tox. 4: Acute toxicity, Hazard Category 4
 Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
 Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
 Muta. 2: Germ cell mutagenicity, Hazard Category 2
 Carc. 2: Carcinogenicity, Hazard Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

- **Sources**

applicable EEC directives:

- 1999/45
- 1907/2006
- 1272/2008

Internal physical tests, MSDS of the ingredients,
 Information system on hazardous substances of the German Social Accident Insurance
 (GESTIS-database on hazardous substances), <http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp>