

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

Printing date 07.04.2015


Version 2


Revision: 07.04.2015


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

- **1.1 Product identifier**
- **Trade name: ADOX ADOTOL Konstant part 1**
- **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 activities
 Consumer use
 Photographic developer
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 ADOX Fotowerke GmbH
 Pieskower Str. 30 A
 D-15526 Bad Saarow
 Tel.: +49 (0)33631 6459-0
 Fax: +49 (0)33631 6459-190
 http://www.adox.de
- **Informing department:**
 Tel.: +49 (0)33631 6459-0
 Fax: +49 (0)33631 6459-190
 E-mail: info@fotoimpex.de
- **1.4 Emergency telephone number:** Tel.: 0700-24112112 (CAL)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 GHS07
 Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 Xi; Irritant
 R36: Irritating to eyes.
- **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.
- **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**
 GHS07
- **Signal word** Warning
- **Hazard statements**
 H319 Causes serious eye irritation.

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- **Precautionary statements**

- P280 Wear eye protection / face protection.
- P264 Wash thoroughly after handling.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- 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: 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 | 25-50% |
|--|--|--------|

- **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** No special measures required.
- **After inhalation** Supply fresh air.
- **After skin contact** The product is not skin irritating.
- **After eye contact**
Rinse opened eye for several minutes under running water (> 15 min). Then consult doctor.
- **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** 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
sulphur dioxide (SO₂)
Carbon monoxide

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- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

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:**
Collect mechanically.
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
No dangerous materials are released.
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** No special measures required.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed containers.
- **Storage class** LGK 13
- **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:**
- **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 hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
- **Breathing equipment:** Not required.
- **Protection of hands:**
Protective gloves.

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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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

- **Material of gloves** Synthetic gloves
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
 Synthetic gloves
 Value for permeation: Level:
 ≥ 3 (60 min)
- **Not suitable are gloves made of the following materials:** Natural rubber, NR
- **Eye protection:** Safety glasses

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

| | |
|----------------|-----------|
| Form: | Solid. |
| Colour: | Whitish |
| Odour: | Odourless |

· **pH-value (60 g/l) at 20 °C:** ca. 11.0

· Change in condition

| | |
|-------------------------------------|----------------|
| Melting point/Melting range: | > 150 °C |
| Boiling point/Boiling range: | Not determined |

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** Not determined

· Solubility in / Miscibility with

Water: Partly soluble

· Solvent content:

Solids content: 100.0 %

· **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 acids releasing sulphur dioxide

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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- **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:**

497-19-8 sodium carbonate

Oral | LD50 | 4000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritant effect.

- **Sensitisation:** No sensitizing effect known.

- **Additional toxicological information:**

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

The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Mixtures as issued in the latest version:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

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.

- **Ecotoxic 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.

Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.

According to the criteria of the EU-classification and labelling "dangerous for environment"(1999/45/EG) the substance/ the product has to be classified as non-hazardous for the environment.

The product does not contain organically bounded halogens (AOX-free).

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

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

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

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.

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Must be specially treated under adherence to official regulations.

| | |
|---|---|
| <ul style="list-style-type: none"> • European waste catalogue | |
| 09 01 01 | water-based developer and activator solutions |

- **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**

- **Water hazard class:** Water hazard class 1 (Self-assessment): weakly water-endangering.

- **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**

H319 Causes serious eye irritation.

R36 Irritating to eyes.

- **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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

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ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

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

• Sources

applicable EEC directives:

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>**• * Data compared to the previous version altered.**

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

- **1.1 Product identifier**
- **Trade name: ADOX ADOTOL Konstant part 2**
- **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 activities
 Consumer use
 Photographic developer
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 ADOX Fotowerke GmbH
 Pieskower Str. 30 A
 D-15526 Bad Saarow
 Tel.: +49 (0)33631 6459-0
 Fax: +49 (0)33631 6459-190
 http://www.adox.de
- **Informing department:**
 Tel.: +49 (0)33631 6459-0
 Fax: +49 (0)33631 6459-190
 E-mail: info@fotoimpex.de
- **1.4 Emergency telephone number:** Tel.: 0700-24112112 (CAL)

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.



GHS09

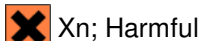
Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

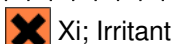
Acute Tox. 4 H302 Harmful if swallowed.
 Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R22-40-68: Harmful if swallowed. Limited evidence of a carcinogenic effect. Possible risk of irreversible effects.



Xi; Irritant

R41: Risk of serious damage to eyes.

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 Xi; Sensitising

R43: May cause sensitisation by skin contact.

 N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

• **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.

• **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 GHS09

• **Signal word** Danger

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

1,4-dihydroxybenzene (hydroquinone)

1-phenyl-3-pyrazolidone

• **Hazard statements**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

• **Precautionary statements**

P280 Wear protective gloves / eye protection.

P273 Avoid release to the environment.

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.

P308+P313 If exposed or concerned: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

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.

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· 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 | 75-100% |
| CAS: 92-43-3 EINECS: 202-155-1 Index number: 606-022-00-2 | 1-phenyl-3-pyrazolidone  Xn R22  N R51/53  Aquatic Chronic 2, H411  Acute Tox. 4, H302 | 5.0-10% |

· **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**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 24 hours after the accident.

Instantly remove any clothing soiled by the product.

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact** Clean with water and soap. If possible, also wash with polyethylene glycol 400.

· **After eye contact**

Rinse opened eye for several minutes under running water (> 15 min). Then consult doctor.

· **After swallowing**

Rinse out mouth and then drink plenty of water.

Induce vomiting and call for medical help.

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

No known symptoms to date.

· **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.

· **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 oxides (SO_x)

· **5.3 Advice for firefighters**

· **Protective equipment:** Do not inhale explosion gases or combustion gases.

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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:**

Collect mechanically.

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** Open and handle container with care.

- **Information about protection against explosions and fires:** No special measures required.

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

- **Storage**

- **Requirements to be met by storerooms and containers:** Store only in the original container.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed containers.

- **Recommended storage temperature:** 5-25 °C

- **Storage class** LGK 13

- **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/m³

- **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**

Keep away from foodstuffs, beverages and food.

Do not eat, drink or smoke while working.

Clean skin thoroughly immediately after handling the product.

Take off immediately all contaminated clothing.

Use skin protection cream for preventive skin protection.

Avoid contact with the eyes.

- **Breathing equipment:** Not necessary if room is well-ventilated.

- **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.

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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 |

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Synthetic gloves

Value for permeation: Level:

≥ 3 (60 min)

· **Not suitable are gloves made of the following materials:** Natural rubber, NR

· **Eye protection:** Tightly sealed safety glasses.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

| | |
|----------------|--------------------|
| Form: | Solid. |
| Colour: | Whitish |
| Odour: | Not characteristic |

· **pH-value (10 g/l) at 25 °C:** 7.5

· **Change in condition**

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Critical values for explosion:**

Oxidising properties None

· **Density** Not determined

· **Solubility in / Miscibility with**

Water at 20 °C: 50 g/l

· **Solvent content:**

Solids content: 100 %

· **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 and alkali

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- Reacts with oxidizing agents
- **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)

92-43-3 1-phenyl-3-pyrazolidone

Oral LD50 200 mg/kg (rat)

· Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.

· Additional toxicological information:

This statement was deduced from the properties of the single components.
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Mixtures as issued in the latest version:

Harmful

Irritant

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)

92-43-3 1-phenyl-3-pyrazolidone

LC50/96 h 1-10 mg/l (Pimephales promelas)

- **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.

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- **Behaviour in sewage processing plants:** Not determined
- **Additional ecological information:**
- **General notes:**
 This statement was deduced from the properties of the single components.
 Water hazard class 3 (German Regulation) (Self-assessment): highly water-endangering.
 Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
 Danger to drinking water if even small quantities leak into soil.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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 |
|----------|---|
- **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, IMDG, IATA** UN 3077
 - **14.2 UN proper shipping name**
 - **ADR** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hydroquinone, 1-Phenyl-3-pyrazolidone)
 - **IMDG, IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hydroquinone, 1-Phenyl-3-pyrazolidone)
 - **14.3 Transport hazard class(es)**
 - **ADR, IATA**
- 

- **Class** 9 Miscellaneous dangerous substances and articles.

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| | |
|---|--|
| · Label | 9 |
| · IMDG | |
|  | |
| · Class | 9 Miscellaneous dangerous substances and articles. |
| · Label | 9 |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | III |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | Yes |
| · Special marking (ADR): | Symbol (fish and tree) |
| · Special marking (IATA): | Symbol (fish and tree) |
| · 14.6 Special precautions for user | Warning: Miscellaneous dangerous substances and articles. |
| · Kemler Number: | 90 |
| · EMS Number: | F-A,S-F |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | These substances when transported in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass of 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general. See the following notes. |
| · ADR | Goods are not subject to the provisions in accordance with the special provision 375 ADR. |
| · IMDG | Goods are not subject to the provisions in accordance with 2.10.2.7 IMDG-Code. |
| · IATA | Goods are not subject to the provisions in accordance with the special provision 197 IATA-DGR. |
| · Remarks: | PAX/CAO 911 |
| · UN "Model Regulation": | UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III |

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 | 96.8 |

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- **Water hazard class:** Water danger class 3 (Self-assessment): highly water-endangering.
- **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

- H302 Harmful if swallowed.
- 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.
- H411 Toxic to aquatic life with long lasting effects.
- R22 Harmful if swallowed.
- R40 Limited evidence of a carcinogenic effect.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R50 Very toxic to aquatic organisms.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 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)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- 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. 4: Acute toxicity, Hazard Category 4
- Eye Dam. 1: Serious eye damage/eye irritation, 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 - Acute Hazard, Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

· Sources

- applicable EEC directives:
- 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>

- * **Data compared to the previous version altered.**

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