

## Safety Data Sheet

### according to 1907/2006/EC, Article 31

Printing date 27.05.2010

version no: 1

Revision: 27.05.2010

## 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**

- **Trade name: ULTRAFIN PLUS**

- **Information** Change of the Point 2 und 15

- **Article number:** 102123 0,2L, 102125 1L, 44059, 1160/3

- **Application of the substance / the preparation**

Black and white developer for photographic use

Developer for photographic use

- **Manufacturer/Supplier:**

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- **Further information obtainable from:** Department environment and safety. E-mail: info@tetenal.com

- **Information in case of emergency:** Poison Information Centre Berlin (Germany): +49 (0) 30 - 30686 790

## 2 Hazards identification

- **Hazard description:**



Xn Harmful

N Dangerous for the environment

- **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.

R 36 Irritating to eyes.

R 40 Limited evidence of a carcinogenic effect.

R 43 May cause sensitisation by skin contact.

R 50 Very toxic to aquatic organisms.

R 68 Possible risk of irreversible effects.

R 31 Contact with acids liberates toxic gas.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **GHS label elements**



**Danger**

H318 - Causes serious eye damage.



**Warning**

H341 - Suspected of causing genetic defects.

H351 - Suspected of causing cancer.

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**Warning**

H400 - Very toxic to aquatic life.

**Warning**

H317 - May cause an allergic skin reaction.

**Warning**

H315 - Causes skin irritation.

EUH031 - Contact with acids liberates toxic gas.

**Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

**Response:**

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 or doctor/physician.

P321 Specific treatment (see on this label).

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

**Chemical characterization****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 63149-47-3 EINECS: 263-968-5	2,2'-iminobisethanol, compound with sulphurdioxide (Diethanolamine-sulphur dioxide complex) ☒ Xn, ☒ Xi; R 21/22-31-36/38 Warning: ☠ 3.1.O/4, 3.2/2, 3.3/2	10-25%
CAS: 111-46-6 EINECS: 203-872-2	diethylene glycol ☒ Xn; R 22 Warning: ☠ 3.1.O/4	1-5%
CAS: 123-31-9 EINECS: 204-617-8	Hydroquinone (1,4-dihydroxybenzene) Carc. Cat. 3, Muta. Cat. 3; ☒ Xn, ☒ Xi, ☠ N; R 22-40-41-43-68-50 Danger: ☠ 3.3/1 Warning: ☠ 3.5/2, 3.6/2; ☠ 4.1.A/1; ☠ 3.1.O/4, 3.4.S/1	2.5-5%
CAS: 13047-13-7 EINECS: 235-920-3	4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one ☒ Xn, ☒ Xi, ☠ N; R 22-36-43-51/53 Warning: ☠ 3.1.O/4, 3.3/2, 3.4.S/1 ☠ 4.1.C/2	<1%

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

### 4 First aid measures

**General information:**

Immediately remove any clothing/shoes soiled by the product.

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Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**· After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:**

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

### 5 Fire-fighting measures

**· Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**· Protective equipment:** No special measures required.

### 6 Accidental release measures

**· Person-related safety precautions:**

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

**· Measures for environmental protection:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**· Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 7 Handling and storage

**· Handling:****· Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**· Information about fire - and explosion protection:** No special measures required.**· Storage:****· Requirements to be met by storerooms and receptacles:** No special requirements.**· Information about storage in one common storage facility:**

Do not store together with acids.

Store away from foodstuffs.

**· Further information about storage conditions:**

Recommended storage temperature: 5-25°C

Store under lock and key and out of the reach of children.

Protect from exposure to the light.

### 8 Exposure controls/personal protection

**· Additional information about design of technical facilities:** No further data; see item 7.

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#### · Ingredients with limit values that require monitoring at the workplace:

##### 111-46-6 diethylene glycol (1-5%)

WEL Long-term value: 101 mg/m<sup>3</sup>, 23 ppm

##### 123-31-9 Hydroquinone (1,4-dihydroxybenzene) (1-5%)

WEL Long-term value: 0.5 mg/m<sup>3</sup>

· **Additional information:** The lists valid during the making were used as basis.

#### · Personal protective equipment:

##### · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

The usual precautionary measures are to be adhered to when handling chemicals.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Ensure adequate ventilation

##### · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

##### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

##### · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Glove material: Butyl rubber with breakthrough-time:  $\geq 480$  min, layer thickness:  $\geq 0,4$  mmGloves made of nitrile rubber with layer thickness  $>0,38$ mm and breakthrough-time  $>480$ minGlove material: Neopren with breakthrough time:  $>240$  min, layer thickness:  $>0,65$  mm

##### · Eye protection:



Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

#### · General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Light yellow
<b>Odour:</b>	Amine-like

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- **Change in condition**  
**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** > 100°C
- **Flash point:** Not applicable.
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapour pressure at 20°C:** 23 hPa
- **Density at 20°C:** 1.27 g/cm<sup>3</sup>
- **Solubility in / Miscibility with water:** Fully miscible.
- **pH-value at 20°C:** 8.9
- **Solvent content:**  
**Organic solvents:** 4.1 %  
**Water:** 52.3 %

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.
- **Dangerous decomposition products:** Irritant gases/vapours

### 11 Toxicological information

- **Acute toxicity:**

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

**63149-47-3 2,2'-iminobisethanol, compound with sulphurdioxide  
(Diethanolamine-sulphur dioxide complex)**

Oral	LD50	1600 mg/kg (rat)
Dermal	LD50	12200 mg/kg (rabbit)

**123-31-9 Hydroquinone (1,4-dihydroxybenzene)**

Oral	LD50	320 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant
- **Sensitisation** May cause sensitisation by skin contact.

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### 12 Ecological information

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

**123-31-9 Hydroquinone (1,4-dihydroxybenzene)**

EC50 48h: 0.29 mg/l (daphnia magna)

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

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Danger to drinking water if even extremely small quantities leak into the ground.

### 13 Disposal considerations

· **Product:**

· **Recommendation**

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

· **European waste catalogue**

09 01 01 | water-based developer and activator solutions

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

· **Land transport ADR/RID (cross-border)**



· **ADR/RID class:** 9 (M6) Miscellaneous dangerous substances and articles.

· **Danger code (Kemler):** 90

· **UN-Number:** 3082

· **Packaging group:** III

· **Hazard label:** 9

· **Special marking:** Symbol (fish and tree)

· **Description of goods:**

· **Tunnel restriction code E**

· **Maritime transport IMDG:**



· **IMDG Class:** 9

· **UN Number:** 3082

· **Label:** 9

· **Packaging group:** III

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- **EMS Number:** F-A,S-F
- **Marine pollutant:** Yes  
Symbol (fish and tree)
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(hydroquinone)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3082
- **Label:** 9
- **Special marking:** Symbol (fish and tree)
- **Packaging group:** III
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(hydroquinone)

- **UN "Model Regulation":** -

## 15 Regulatory information

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xn Harmful  
N Dangerous for the environment

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

Hydroquinone (1,4-dihydroxybenzene)

- **Risk phrases:**

36 Irritating to eyes.  
40 Limited evidence of a carcinogenic effect.  
43 May cause sensitisation by skin contact.  
50 Very toxic to aquatic organisms.  
68 Possible risk of irreversible effects.  
31 Contact with acids liberates toxic gas.

- **Safety phrases:**

2 Keep out of the reach of children.  
29 Do not empty into drains.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
46 If swallowed, seek medical advice immediately and show this container or label.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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**· Relevant R-phrases**

- 21/22 Harmful in contact with skin and if swallowed.
- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36 Irritating to eyes.
- 36/38 Irritating to eyes and skin.
- 40 Limited evidence of a carcinogenic effect.
- 41 Risk of serious damage to eyes.
- 43 May cause sensitisation by skin contact.
- 50 Very toxic to aquatic organisms.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 68 Possible risk of irreversible effects.

**· Department issuing MSDS:** Department product safety**· Contact:** e-mail: sida@tetenal.com**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

**· \* Data compared to the previous version altered.**