ECO FILM DEVELOPER

1) substance-/ preparation and company name

Chemical name/ Trade name: ECO FILM DEVELOPER
Application/use: Photographic developer
Company name: Wolfgang Moersch Photochemie, Am Heideberg 48
D 50354 Hürth, Germany
Telephone: ++49 22 33 943137

2) Hazards identification

MAY BE HARMFUL IF ABSORBED THROUGH SKIN, OR SWALLOWED
CAUSES SKIN AND EYE IRRITATION
MAY CAUSE ALLERGIC SKIN REACTION

3) composition/details on components
This product is a preparation according to the law for chemicals.
Description: Aqueous solution containing inorganic and organic substances

<table>
<thead>
<tr>
<th>Name</th>
<th>Content</th>
<th>CAS</th>
<th>EINECS</th>
<th>CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4 DIHYDROXYBENZENE POTASSIUM SALT</td>
<td>35-40</td>
<td>21799-87-1</td>
<td>244-584-7</td>
<td>not classified</td>
</tr>
<tr>
<td>POTASSIUM CARBONATE</td>
<td>10</td>
<td>584-08-7</td>
<td>209-529-3</td>
<td>Xn R-22, 36</td>
</tr>
<tr>
<td>DIETHYLENE GLYCOL</td>
<td>&gt;4</td>
<td>111-46-6</td>
<td>203-872-2</td>
<td>Xn R-22</td>
</tr>
<tr>
<td>1-PHENYL-4-METHYL-4-HYDROXYMETHYL-3 PYRAZOLIDONE</td>
<td>&gt;1</td>
<td>13047-13-7</td>
<td>235-920-3</td>
<td>Xn R-48/22</td>
</tr>
<tr>
<td>DIETHYLENENTRIAMINE PENTAACETIC ACID NA5</td>
<td>&gt;1</td>
<td>67-43-6</td>
<td>200-652-8</td>
<td>Xi R-36</td>
</tr>
<tr>
<td>SODIUM SULPHITE</td>
<td>10-15</td>
<td>7757-83-7</td>
<td>231-821-4</td>
<td>not classified</td>
</tr>
</tbody>
</table>

Other information: further principal ingredient: Water

4) first aid precautions

General notes: change contaminated, wet clothing.
After breathing in: None of special precautions required.
After skin contact: at skin contact wash immediately with water and soap.
Wash clothing before reuse.
After eye contact: At eye contact open eyelids wash with water
Consult eye specialist at eye irritation.
After swallowing: Rinse out mouth with water and drink a lot of water afterwards

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EC safety data sheet
According to 91/155/EWG

ECO FILM DEVELOPER

5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: Coordinate extinguishing precautions on the surrounding fire.
for security reasons: None confessed.
unsuitable extinguishing agents: released by fire can be: carbon monoxide, carbon dioxide
Special endangerings of the substance or the product itself:
sulfur dioxide
its waste products of combustion or:
Special protection equipment:
for fire fighting: None of special equipment required.
Additional notes: Product does not burn.

6) PRECAUTIONS at unintentional release

Person drawee: Use personal protective clothing.
Precautions: none
Environment protective measures: liquid binding materials (e.g. sand, pebble sand, sawdust, universal binding agents).
proceedings for cleaning/binding: Treat the taken material according to waste management section.
Additional notes: None of special equipment required.

7) handling and storage

Indications for safe contact: At proper use none of special precautions required.
Points on fire-and explosion protection: The product is not combustible.
Requirements on storerooms and containers: None of special requirements necessary. Keep container tightly closed.
Together storage notes: None of special precautions required.
More details on Storage conditions: Recommended storage temperature: 10 to 35 C
Store class: LGK 12 (VCI strategy)

8) outline demarcation and personal protection equipment

- Additional information: The lists that were valid during the compilation were used as basis.
- 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: Not required.
- Eye protection: Tightly sealed safety glasses.

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### 9) physical and chemical qualities

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Colourless, clear.</td>
</tr>
<tr>
<td><strong>Smell</strong></td>
<td>Odourless.</td>
</tr>
<tr>
<td><strong>pH value</strong></td>
<td>Solution A 7.25, Solution B 13.20, Working solution 10.65 (20°C)</td>
</tr>
<tr>
<td><strong>Boiling-point/boiling area</strong></td>
<td>≥ 100°C</td>
</tr>
<tr>
<td><strong>Melting point/glaze area</strong></td>
<td>≤ 0°C</td>
</tr>
<tr>
<td><strong>Flaming point</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Inflammability</strong></td>
<td>Not inflammable.</td>
</tr>
<tr>
<td><strong>Catching light temperature</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Self flammability</strong></td>
<td>Not self-flammable</td>
</tr>
<tr>
<td><strong>Fire promoting</strong></td>
<td>Not combustible.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>No danger of explosion.</td>
</tr>
<tr>
<td><strong>Vapor pression</strong></td>
<td>Remark: Corresponds to the vapor pression of water.</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>1.150 g/ml (20°C)</td>
</tr>
<tr>
<td><strong>Pouring density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility into water</strong></td>
<td>Mixable.</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No relevant data.</td>
</tr>
<tr>
<td><strong>Distribution coefficient</strong></td>
<td></td>
</tr>
<tr>
<td><strong>n-Oktanol/water</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dynamic viscosity</strong></td>
<td>no relevant data.</td>
</tr>
<tr>
<td><strong>other details</strong></td>
<td>There are not further data.</td>
</tr>
</tbody>
</table>

### 10) stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous reactions:** No dangerous reactions known

**Dangerous products of decomposition:** No dangerous decomposition products known

### 11) details on toxicology

**Toxicological tests:**
- **Acute Toxicity:** No relevant data.
- **Specific symptoms in this context:** No relevant data.
- **Animal experiment:**

**Irritation-/ etching effect:** The details refer to the technical active agents
- **Skin:** Slightly irritating
- **Eyes:** Strongly irritating
- **Sensitization:** Sensitization of skin is possible.
- **Effect after repeated or longer continuous expose:** None

**Other details:** No further data.

**Experiences from the practice:** No relevant data.

**General remarks:** There are no toxicological data. The classification was carried out

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according the calculation proceedings of preparation guideline ( 88/379/EEC).

12) details on ecology

General notes:
There are no data.
The product was not tested.
Remarks: Does not reach by correct use into the waste water.

13) indications for waste management

Product:
The corresponding local water-and waste regulations must be observed. Do not dispose with domestic garbage.
Do not let it get into the sewage system.

European waste catalog:
09 00 00: Waste from the photographic industry
09 01 00: Waste from the photographic industry
09 01 01: Developer and activators on water base

Packing:
Not contaminated packings can be recycled.
Empty packing completely, wash well
(Cleaning agent: water), can be recycled afterwards

14) transport information

ADR CLASS:
Not classified for transportation.

ROAD TRANSPORT NOTES:
Not classified for road transport

RAIL TRANSPORT NOTES:
Not classified for rail transport

SEA TRANSPORT NOTES:
Not classified for sea transport

AIR TRANSPORT NOTES:
Not classified for air transport

15) regulations

Identification:
The product is classified and labeled according to EC guidelines ( GefStoffVO)

Classification letter:

Danger identification: harmful if swallowed
R sentences: R-36 Irritating to eyes.

S sentences:
S-2 Keep out of reach of children.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-46 If swallowed seek medical advice immediately

Remarks:
This classification was carried out according to the calculation method for preparations guideline ( 88/379/EEC).

Technical instructions air:
This TA isn't a subject.

Water endangering class (WGK):
2 (water endangering)
(Classification in accordance with VwVwS, appendix 4)

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16). other details

Use: Photographic developer

Further information:
These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process. The information corresponds to our today's knowledge, it is correct and complete and with best conscience, given without a guarantee, though. It shall describe our product with a view to safety requirements and has therefore not the meaning to assure of certain qualities. The responsibility of the use of this product remains on the user whether the information is complete and suitable for his special use.

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