

SAFETY DATA SHEET
according to EC directive 2001/58/EC



CEAROLL TT, PART B

Version 1
Revision Date 11.01.2007

SUBID : 00000011436
Print Date 13.01.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation

Product name : CEAROLL TT, PART B
Use of the Substance/Preparation : Photographic developer concentrate

Company/Undertaking Identification

CEA AB
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SE-645 41 STRÄNGNÄS
SWEDEN
www.cea.se
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2. COMPOSITION/INFORMATION ON INGREDIENTS

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 15. Full text of each relevant R-phrases is listed in section 16.

Aqueous photographic developer concentrate, mainly consisting of:

Hazardous components

- | | | | | | |
|---------------------------|----------------|---------------------|------|---|------|
| • Diethylene glycol | | Concentration [%] : | 40.0 | - | 60.0 |
| CAS-No. | : 111-46-6 | | | | |
| Index-No. | : 603-140-00-6 | | | | |
| EINECS-No. | : 203-872-2 | | | | |
| Symbol(s) | : Xn | | | | |
| R-phrases | : R22 | | | | |
| • Acetic acid | | Concentration [%] : | 10.0 | - | 20.0 |
| CAS-No. | : 64-19-7 | | | | |
| Index-No. | : 607-002-00-6 | | | | |
| EINECS-No. | : 200-580-7 | | | | |
| Symbol(s) | : C | | | | |
| R-phrases | : R10, R35 | | | | |
| • 1-Phenyl-3-pyrazolidone | | Concentration [%] : | 0.5 | - | 1.0 |
| CAS-No. | : 92-43-3 | | | | |
| Index-No. | : 606-022-00-2 | | | | |
| EINECS-No. | : 202-155-1 | | | | |
| Symbol(s) | : Xn, N | | | | |
| R-phrases | : R22, R51/53 | | | | |

3. HAZARDS IDENTIFICATION

EC-classification:

Symbol(s) : Xn Harmful
R-phrases(s) : R22 Harmful if swallowed.
R36/38 Irritating to eyes and skin.



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4. FIRST AID MEASURES

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
- Ingestion : Rinse mouth with plenty of water. Seek medical advice.
- Inhalation : Take person to fresh air. If necessary, seek medical advice.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : e.g. water, CO₂, foam, powder, sand

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : See section 8.
- Environmental precautions : For waste disposal see section 13.
- Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.
- Additional advice : Wash away residues with plenty of water.

7. HANDLING AND STORAGE

Handling

- Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Storage

- Requirements for storage areas and containers : Keep container tightly closed. Protect from direct sunlight.
- Advice on common storage : Store away from strong acids, strong alkalis and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values

Components	CAS-No.	Values	Type	Revision Date	Basis
Diethylene glycol	111-46-6	101 mg/m ³	TWA	2005	EH40 WEL
Acetic acid	64-19-7	25 mg/m ³	TWA	05 2001	EU ELV

Exposure controls

- Engineering measures : Ventilation should be sufficient so that any applicable occupational exposure limits are not exceeded.
- Hygiene measures : Observe normal precautions when handling chemicals. Avoid inhaling vapour. Keep away from foodstuffs, drinks and



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Hand protection : tobacco.
: Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \geq 0.36 mm, breakthrough time $>$ 480 min), nitrile rubber (thickness \geq 0.38 mm, breakthrough time $>$ 480 min) or neoprene (thickness \geq 0.65 mm, breakthrough time $>$ 240 min). For intermittent splash protection corresponding gloves with breakthrough times $>$ 60 min can be used. Avoid gloves made of: natural latex.

Eye protection : Safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form : Liquid
Colour : Yellow to orange
Odour : Smell of acetic acid

Important Health Safety and Environmental Information

Relative density (20 °C) : 1.123
Solubility/qualitative : Miscible with water at all ratios.
pH (25 °C) : 2.7
Melting point/range : $<$ 0 °C
Boiling point/range : $>$ 100 °C

10. STABILITY AND REACTIVITY

Stability : The product is stable under normal conditions of storage and use.

Conditions and materials to avoid : Avoid contact with strong acids, strong alkalis and strong oxidizing agents. Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products.

Hazardous decomposition products : None

11. TOXICOLOGICAL INFORMATION

Harmful if swallowed.
Irritating to eyes and skin.

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

• Diethylene glycol : LD50 rat 12,565 mg/kg
• Acetic acid : LD50 rat 3,310 mg/kg
• 1-Phenyl-3-pyrazolidone : LD50 rat 200 mg/kg

Acute inhalation toxicity

• Acetic acid : LC50 rat 11.4 mg/l/ 4 h

Acute dermal toxicity

• Diethylene glycol : LD50 rabbit 11,890 mg/kg



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- Acetic acid : LD50 rabbit 1,060 mg/kg
- 1-Phenyl-3-pyrazolidone : LD50 guinea pig > 1,000 mg/kg

Other information

In normal conditions of use, sulphur dioxide may be set free in concentrations well below the threshold limit value (TLV) of 2 ppm. Asthmatic individuals, however, may possibly be sensitive to concentrations as low as 0.1 ppm. Hazard labelling of this preparation: see section 15.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradation

- Acetic acid : OECD 301D Assessment of biological degradability
99 % after 30 d
- 1-Phenyl-3-pyrazolidone : OECD 302B Inherent biodegradability
64 % after 28 d

Ecotoxicity effects

Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to fish

- Diethylene glycol : Species: *Lepomis macrochirus* (bluegill sunfish)
LC50: > 1,000 mg/l/ 96 h
- Acetic acid : Species: *Pimephales promelas* (fathead minnow)
LC50: 88 mg/l/ 96 h
- 1-Phenyl-3-pyrazolidone : Species: *Pimephales promelas* (fathead minnow)
LC50: < 10 mg/l/ 96 h

Toxicity to daphnia

- Diethylene glycol : Species: *Daphnia magna* (water flea)
EC50: > 1,000 mg/l/ 24 h
- Acetic acid : Species: *Daphnia magna* (water flea)
EC50: 47 mg/l/ 24 h
- 1-Phenyl-3-pyrazolidone : Species: *Daphnia magna* (water flea)
EC50: 10 mg/l/ 96 h

Toxicity to algae

- Diethylene glycol : Species: *Scenedesmus quadricauda* (algae)
EC0: 2,700 mg/l/ 7 d
- Acetic acid : Species: *Scenedesmus quadricauda* (algae)
EC10: 4,000 mg/l/ 8 d
- 1-Phenyl-3-pyrazolidone : Species: *Selenastrum capricornutum* (algae)
EC0: 10 mg/l/ 48 h

Toxicity to bacteria

- Diethylene glycol : Species: *Pseudomonas putida* (bacteria)
EC10: 8,000 mg/l/ 72 h
- Acetic acid : Species: *Pseudomonas putida* (bacteria)
EC10: 2,850 mg/l/ 16 h



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13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Environmental regulations, discharge of chemicals and washwater, waste treatment and disposal conditions of chemicals and their packaging may vary from one country to another. The relevant local regulations should be consulted. When this product or its contaminated packaging has to be removed as waste, contact an authorized waste contractor. May be discharged to drain if local regulations permit.

For waste resulting from this product, it is recommended to use European Waste Code : 09 01 01 (water-based developer and activator solutions).

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives

Hazardous components which must be listed on the label :

• CAS-No.	:	111-46-6	Diethylene glycol
		64-19-7	Acetic acid
Symbol(s)	:	Xn	Harmful
R-phrases(s)	:	R22	Harmful if swallowed.
		R36/38	Irritating to eyes and skin.
S-phrases(s)	:	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S46	If swallowed, seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

Section(s) changed compared to the previous issue: 2, 8, 9

Further information

Text of R-phrases referred to under headings 2 and 3:

R10	Flammable.
R22	Harmful if swallowed.
R35	Causes severe burns.
R36/38	Irritating to eyes and skin.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This Safety Data Sheet is compiled in accordance with European Directives and corresponding national legislation.

The information disclosed in this Safety Data Sheet is believed to be correct to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other material or in any process, unless specified in the text. This document aims to provide the necessary health and safety

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information of the product and is not to be considered a warranty or quality specification. It is the responsibility of the user to comply with local legislation relating to safety, health, environment and waste management.