

SAFETY DATA SHEET

according to EC directive 2001/58/EC



G135, PART B

SUBID : 000000005596

Version 8

Print Date 03.01.2007

Revision Date 21.12.2006

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

Identification of the substance/preparation

Product name : G135, PART B
Use of the Substance/Preparation : Photographic developer concentrate

Company/Undertaking Identification

Agfa-Gevaert Ltd.
27 Great West Road
TW8 9AX Brentford, Middlesex
United Kingdom
Tel. : +44 (0)20 8 231 4616
Fax : +44 (0)20 8 231 4951

Emergency telephone number (Belgium) : +32 3 4443333

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-phrase is listed in section 16.

Aqueous photographic developer concentrate, mainly consisting of:

Hazardous components

- | | | | | |
|---------------------------|---------------------|--------------|---|------|
| • Diethylene glycol | Concentration [%] : | 60.0 | - | 80.0 |
| CAS-No. | : | 111-46-6 | | |
| Index-No. | : | 603-140-00-6 | | |
| EINECS-No. | : | 203-872-2 | | |
| Symbol(s) | : | Xn | | |
| R-phrase(s) | : | R22 | | |
| • Acetic acid | Concentration [%] : | 30.0 | - | 40.0 |
| CAS-No. | : | 64-19-7 | | |
| Index-No. | : | 607-002-00-6 | | |
| EINECS-No. | : | 200-580-7 | | |
| Symbol(s) | : | C | | |
| R-phrase(s) | : | R10, R35 | | |
| • 1-Phenyl-3-pyrazolidone | Concentration [%] : | 1.0 | - | 5.0 |
| CAS-No. | : | 92-43-3 | | |
| Index-No. | : | 606-022-00-2 | | |
| EINECS-No. | : | 202-155-1 | | |
| Symbol(s) | : | Xn, N | | |
| R-phrase(s) | : | R22, R51/53 | | |

3. HAZARDS IDENTIFICATION

EC-classification:

| | | | |
|-------------|---|--------|---|
| Symbol(s) | : | C | Corrosive |
| R-phrase(s) | : | R22 | Harmful if swallowed. |
| | | R34 | Causes burns. |
| | | R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

SAFETY DATA SHEET

according to EC directive 2001/58/EC



G135, PART B

SUBID : 000000005596

Version 8
Revision Date 21.12.2006

Print Date 03.01.2007

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 alkalis and 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 tobacco.

G135, PART B

SUBID : 000000005596

Version 8
Revision Date 21.12.2006

Print Date 03.01.2007

- Hand protection : 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 goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

- Form : Liquid
Colour : Colourless to yellowish
Odour : Smell of acetic acid

Important Health Safety and Environmental Information

- Relative density (20 °C) : 1.104
Solubility/qualitative : Miscible with water at all ratios.
pH (25 °C) : 1.3
Melting point/range : < 0 °C
Boiling point/range : > 100 °C
Flash point : > 62 °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 alkalis and 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.
Causes burns.

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
- Acetic acid : LD50 rabbit 1,060 mg/kg

SAFETY DATA SHEET

according to EC directive 2001/58/EC



G135, PART B

SUBID : 000000005596

Version 8

Print Date 03.01.2007

Revision Date 21.12.2006

- 1-Phenyl-3-pyrazolidone : LD50 guinea pig > 1,000 mg/kg

Other information

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

Further information on ecology

Chemical Oxygen Demand (COD) : 1,150,000 mg/l

SAFETY DATA SHEET

according to EC directive 2001/58/EC



G135, PART B

SUBID : 000000005596

Version 8
Revision Date 21.12.2006

Print Date 03.01.2007

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

ADR

UN-No : 2790
Proper shipping name : ACETIC ACID SOLUTION
Class : 8
Packing group : III
Classification Code : C3
Labelling No. : 8
Risk No. : 80

RID

UN-No : 2790
Proper shipping name : ACETIC ACID SOLUTION
Class : 8
Packing group : III
Classification Code : C3
Labelling No. : 8
Risk No. : 80

ADNR

UN-No : 2790
Proper shipping name : ACETIC ACID SOLUTION
Class : 8
Packing group : III
Classification Code : C3
Labelling No. : 8

IMO / IMDG

UN-No : 2790
Proper shipping name : ACETIC ACID SOLUTION
Class : 8
Packing group : III
Labelling No. : 8
EmS : F-A, S-B

ICAO / IATA cargo aircraft only

UN-No : 2790
Proper shipping name : Acetic acid solution
Class : 8
Packing group : III
Labelling No. : 8
Packing instruction : 820

SAFETY DATA SHEET

according to EC directive 2001/58/EC



G135, PART B

SUBID : 00000005596

Version 8

Print Date 03.01.2007

Revision Date 21.12.2006

ICAO / IATA passenger and cargo aircraft

| | | |
|----------------------|---|----------------------|
| UN-No | : | 2790 |
| Proper shipping name | : | Acetic acid solution |
| Class | : | 8 |
| Packing group | : | III |
| Labelling No. | : | 8 |
| Packing instruction | : | 818 |

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) | : | C | Corrosive |
| R-phrases(s) | : | R22 | Harmful if swallowed. |
| | | R34 | Causes burns. |
| | | R52/53 | Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| S-phrases(s) | : | S23 | Do not breathe gas/fumes/vapour/spray. |
| | | S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| | | S45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |

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. |
| R34 | Causes burns. |
| R35 | Causes severe burns. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R52/53 | Harmful 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 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.