

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006



Koru Film Fixer (READY FOR USE / 1+4)

SUBID : 000001010622

Version 1

Print Date 21.10.2009

Revision Date 05.10.2009

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

Identification of the substance/preparation

Product name : Koru Film Fixer (READY FOR USE / 1+4)
Use of the : Photographic fixing solution
Substance/Preparation

Company/Undertaking Identification

Agfa-Gevaert NV
Septestraat 27
2640 Mortsel
Belgium
Tel. : +32 3 4445501
Fax : +32 3 4445503
Person responsible for the safety data sheet: Eddy Michiels
E-mail: info@Koru-graphics.com

Emergency telephone number : +32 3 4443333 (24h/24h)

2. HAZARDS IDENTIFICATION

This preparation does not meet any of the criteria for classification as dangerous as defined by EC Directives and transposed into national legislation.

3. 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 fixing solution, mainly consisting of:

Hazardous components

• Acetic acid	Concentration [%] :	0,5	-	1,0
CAS-No.	:	64-19-7		
Index-No.	:	607-002-00-6		
EINECS-No.	:	200-580-7		
Symbol(s)	:	C		
R-phrases(s)	:	R10, R35		

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.

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5. FIRE-FIGHTING MEASURES

Further information : Product is not combustible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : See section : Exposure controls / personel protection.
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 : No special protective measures against fire and explosion required.

Storage

Requirements for storage areas and containers : Keep container tightly closed. Protect from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values

Components	CAS-No.	Values	Type	Revision Date	Basis
Acetic acid	64-19-7	25 mg/m3	MAK	07 2001	MAK (AT)
		50 mg/m3	MAK	07 2001	MAK (AT)
		25 mg/m3	CEIL 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.
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 glasses.

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9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form : Liquid.
Colour : Colourless.
Odour : Nearly odourless

Important Health Safety and Environmental Information

Vapour pressure (20 °C) : 23 hPa
Relative density (20 °C) : 1,065
Solubility/qualitative : Miscible with water at all ratios.
pH (25 °C) : 5,3
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.
Hazardous decomposition products : None

11. TOXICOLOGICAL INFORMATION

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

• Acetic acid : LD50 rat 3.310 mg/kg

Acute inhalation toxicity

• Acetic acid : LC50 rat 11,4 mg/l/ 4 h

Acute dermal toxicity

• Acetic acid : LD50 rabbit 1.060 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.

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Biodegradation

• Acetic acid : OECD 301D Assessment of biological degradability
99 % after 30 d

Ecotoxicity effects

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Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to fish

- Acetic acid : Species: Pimephales promelas (fathead minnow)
LC50: 88 mg/l/ 96 h

Toxicity to daphnia

- Acetic acid : Species: Daphnia magna (water flea)
EC50: 47 mg/l/ 24 h

Toxicity to algae

- Acetic acid : Species: Scenedesmus quadricauda (algae)
EC10: 4.000 mg/l/ 8 d

Toxicity to bacteria

- Acetic acid : Species: Pseudomonas putida (bacteria)
EC10: 2.850 mg/l/ 16 h

Further information on ecology

- Biochemical oxygen demand (BOD) : 17.200 mg/l
- Chemical Oxygen Demand (COD) : 77.900 mg/l

This preparation does not contain any ingredient that is classified as hazardous to the environment according to European Directives and corresponding national legislation.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Environmental regulations, discharge of chemicals and wastewater, 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. As the used product contains water soluble silver complexes, it is recommended to subject it to a silver recovery process prior to disposal. 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 04 (fixer solutions). For Austria: Classification according to waste catalog ÖNORM S 2100 respectively Festsetzungsverordnung i.d.g.F. waste key number 52707

14. TRANSPORT INFORMATION

Not dangerous cargo. Keep separated from food- and drinkstuffs.

15. REGULATORY INFORMATION

This product is not to be labelled as a dangerous substance or preparation as defined by EC Directives and transposed into national legislation.

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16. OTHER INFORMATION

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

Further information

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

R10	Flammable.
R35	Causes severe burns.

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.