

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006



FINISHER CONCENTRATE

SUBID : 000000009768

Version 3

Print Date 18.07.2008

Revision Date 17.07.2008

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

Identification of the substance/preparation

Product name : FINISHER CONCENTRATE
Use of the Substance/Preparation : Offset plate finisher solution

Company/Undertaking Identification

Agfa-Gevaert Ltd.
Vantage West
Great West Road
Brentford, Middlesex TW8 9AX
United Kingdom

Tel. : +44 (0)20 8 231 4616

Fax : +44 (0)20 8 231 4951

Person responsible for the safety data sheet: Jos Vanholzaets

E-mail: electronic.sds@agfa.com

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

2. HAZARDS IDENTIFICATION

EC-classification:

Symbol(s) : Xi Irritant
R-phrases(s) : R43 May cause sensitization by skin contact.

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-phrase is listed in section 16.

Aqueous offset plate finisher solution, mainly consisting of:

Hazardous components

- Sodium formate Concentration [%] : 1.0 - 5.0
CAS-No. : 141-53-7
EINECS-No. : 205-488-0
Symbol(s) : Xi
R-phrase(s) : R36/37/38
- Subtilisin Concentration [%] : 0.5 - 1.0
CAS-No. : 9014-01-1
Index-No. : 647-012-00-8
EINECS-No. : 232-752-2
Symbol(s) : Xn
R-phrase(s) : R37/38, R41, R42
- 1-Octyl-5-mercaptopotrazole sodium salt Concentration [%] : 0.1 - 0.5
CAS-No. : 266310-25-2
Symbol(s) : C, N
R-phrase(s) : R22, R34, R51/53
- Isothiazolinones Concentration [%] : 0.0 - 0.1
CAS-No. : 55965-84-9
Index-No. : 613-167-00-5

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Symbol(s) : T, N
R-phrases) : R23/24/25, R34, R43, R50/53

Other

- Polyglycol Concentration [%] : 20.0 - 30.0
- Triethanolamine Concentration [%] : 1.0 - 5.0
- Boric acid Concentration [%] : 1.0 - 5.0

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

- 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
Subtilisin	9014-01-1	0.00004 ppm	TWA	2005	EH40 WEL

Exposure controls

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Engineering measures	:	Ventilation should be sufficient so that any applicable occupational exposure limits are not exceeded.
Hygiene measures	:	Observe normal precautions when handling chemicals. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form	:	Liquid.
Colour	:	Brownish
Odour	:	Nearly odourless

Important Health Safety and Environmental Information

Vapour pressure (20 °C)	:	23.00 hPa
Relative density (20 °C)	:	1.183
Solubility/qualitative	:	Miscible with water at all ratios.
pH (25 °C)	:	8.1
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

May cause sensitization by skin contact.

Toxicity data specific for individual ingredients in their pure state:

Acute oral toxicity

• Sodium formate	:	LD50 rat	$>$ 3,000 mg/kg
• Subtilisin	:	LD50 rat	$>$ 3,700 mg/kg
• 1-Octyl-5-mercaptotetrazole sodium salt	:	LD50 rat	1,542 mg/kg
• Isothiazolinones	:	LD50 rat	$>$ 2,000 mg/kg

Acute dermal toxicity

• 1-Octyl-5-mercaptotetrazole sodium	:	LD50 rat	$>$ 2,000 mg/kg
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- salt
- Isothiazolinones : LD50 rat > 5,000 mg/kg

Other information

Hazard labelling of this preparation or substance : see section 15.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Ecotoxicity data specific for individual ingredients in their pure state:

Toxicity to fish

- Sodium formate : Species: *Leuciscus idus* (golden orfe)
LC50: > 1,000 mg/l/ 48 h
- 1-Octyl-5-mercaptotetrazole sodium salt : Species: *Cyprinus carpio* (carp)
LC50: 49 mg/l/ 96 h

Toxicity to daphnia

- Sodium formate : Species: *Daphnia magna* (water flea)
EC50: > 1,000 mg/l/ 24 h
- 1-Octyl-5-mercaptotetrazole sodium salt : Species: *Daphnia magna* (water flea)
EC50: 4.3 mg/l/ 48 h

Toxicity to algae

- Sodium formate : Species: *Desmodesmus subspicatus* (algae)
EC0: > 1,000 mg/l/ 72 h
- 1-Octyl-5-mercaptotetrazole sodium salt : Species: *Selenastrum capricornutum* (algae)
EC50: 6.1 mg/l/ 72 h

Toxicity to bacteria

- Sodium formate : Species: *Pseudomonas putida* (bacteria)
EC10: 5,725 mg/l/ 18 h

This substance is not 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 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 : 08 03 12 (waste ink containing dangerous substances).

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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.	: 9014-01-1	Subtilisin
	: 55965-84-9	Isothiazolinones
Symbol(s)	: Xi	Irritant
R-pharse(s)	: R43	May cause sensitization by skin contact.
S-pharse(s)	: S24	Avoid contact with skin.
	: S37	Wear suitable gloves.

16. OTHER INFORMATION

Further information

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

R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R42	May cause sensitization by inhalation.
R43	May cause sensitization by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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 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.