

**KLORILLI**

Date 2.9.2004

Previous date: 27.4.2004

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING****1.1 Identification of the article****1.1.1 Commercial Product Name**

KLORILLI

**1.1.2 Product code**

8109,8110,8191

**1.2 Use of the Substance/Preparation****1.2.1 Expressed in writing**

Liquid Chloramine Disinfectant

**1.3 Identification of the substance/preparation and the company/undertaking****1.3.1 Supplier**

Farmos Oy

**1.3.2 Contact information****Street address**

Tengströminkatu 6

**Postcode and post office**

FIN-20360 TURKU

FINLAND

**P.O.Box**

P.O. BOX 157

**Postcode and post office**

FI-20101 TURKU

FINLAND

**Telephone**

+358 204 877 110

**Telefax**

+358 204 877 720

**2. COMPOSITION/INFORMATION ON INGREDIENTS****2.1 Hazardous components**

<b>2.1.1 CAS number or other code</b>	<b>2.1.2 Chemical name of the substance</b>	<b>2.1.3 Concentration</b>	<b>2.1.4 Classification</b>
6834-92-0	Disodium metasilicate	< 5 %	C; R34-37
127-65-1	Chloramine T (sodium salt)	5 - 10 %	C, R22-31-34-42
	Sek. alkane sulphonate	<5 %	Xi, R38-41

**3. HAZARDS IDENTIFICATION**

Irritates eyes and skin. May cause sensitization by inhalation.  
Xn, R36/38-42

**4. FIRST AID MEASURES****4.2 Inhalation**

In the case of inhalation of aerosol/mist consult a physician if necessary Move to fresh air.

**4.3 Skin contact**

Rinse with water.

**4.4 Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

**4.5 Ingestion**

Consult a physician.

**4.6 Information to doctor or other trained persons giving first aid**

Contains silicate and cloramide.

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**5. FIRE-FIGHTING MEASURES**

- 5.3 Specific hazards**  
May form chlorine gas when heated.
- 5.4 Special protective equipment for firefighters**  
Protective equipments for inhalation and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

- 6.1 Personal precautions**  
Evacuate personnel to safe areas.
- 6.2 Environmental precautions**  
Should not be released into the environment.
- 6.3 Methods for cleaning up**  
Flush with water.

**7. HANDLING AND STORAGE**

- 7.1 Handling**  
Keep containers dry and tightly closed to avoid moisture absorption and contamination.
- 7.2 Storage**  
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
- 8.2.1.1 Respiratory protection**  
Breathing apparatus only if aerosol or dust is formed.
- 8.2.1.2 Hand protection**  
rubber or plastic gloves
- 8.2.1.3 Eye protection**  
tightly fitting safety goggles
- 8.2.1.4 Skin and body protection**  
Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.
- 8.2.2 Environmental exposure controls**  
Do not release into the environment.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 General Information (appearance, odour)**  
Clear liquid.
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** 13,1
- 9.2.2 Boiling point/range** 100 C (vesi)
- 9.2.8 Relative density** 1038g/l 20 C
- 9.2.9 Solubility**
- 9.2.9.1 Water solubility** good

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**10. STABILITY AND REACTIVITY**

- 10.1 Conditions to avoid**  
Don't freeze.
- 10.2 Materials to avoid**  
Aluminium may be corroded.
- 10.3 Hazardous decomposition products**  
Reaction with acids forms chlorine gas.

**11. TOXICOLOGICAL INFORMATION**

- 11.1 Acute toxicity**  
Cloramid LD50= n.1000 mg/kg a rattby eating
- 11.2 Primary irritation**  
Irritates eyes and skin.
- 11.3 Sensitisation**  
Breathing of aerosol may be sensitizing.

**12. ECOLOGICAL INFORMATION**

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**  
Harmful, (Cloramid LC50 =31 mg/l fish, EC50= 4,5 mg/l Daphnia.)
- 12.1.2 Toxicity to other organisms**  
Harmful
- 12.2 Mobility**  
With water
- 12.3 Persistence and degradability**
- 12.3.1 Biodegradation**  
> 80 %

**13. DISPOSAL CONSIDERATIONS**

Collect all waste in suitable and labelled containers and dispose of in compliance with "national regulation of radiation protection and hazardous waste".

**14. TRANSPORT INFORMATION****15. REGULATORY INFORMATION**

- 15.1 Information on the warning label**
- 15.1.1 Letter code of the warning symbol and indications of danger for the preparation**  
Xn Harmful
- 15.1.2 Names of the ingredients given on the warning label**  
Chloramin T(sodim salt)
- 15.1.3 R phrase(s)**  
R36/38 Irritating to eyes and skin.  
R42 May cause sensitization by inhalation.
- 15.1.4 S phrase(s)**  
S23 Do not breathe gas.

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S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.

**16. OTHER INFORMATION****16.1 List of the relevant R phrases**

R36/38	Irritating to eyes and skin.
R42	May cause sensitization by inhalation.
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R34	Causes burns.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

**16.2 Training advice**

Red the label.

**16.4 Additional information available from:**

Registered office and domicile: Farnos Oy., Lasikuja 2, FI-02780 ESPOO

**16.6 Additions, Deletions, Revisions**

The registered company has been changed.