

Product name: **F 26 BOXAN**

Date 20.2.2004

Previous date 28.11.2002

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SAFETY DATA SHEET

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

1.1 Identification of the substance/preparation

Product name

F 26 BOXAN

Product code

80351,80372,80352

1.2 Use of the Substance/Preparation

1.2.1 Expressed in writing

Strongly alkaline and disinfective detergent for food industry.

1.3 Company/Undertaking Identification

1.3.1 Manufacturer, importer, supplier

FARMOS

1.3.2 Contact information

Street address

Tengströminkatu 6

Postcode and post office

20360 TURKU

Post-office box

PL 157

Postcode and post office

FIN-20101 TURKU

Telephone

0204 877 110

Telefax

0204 877 720

Business ID

1847184-7

1.4 Emergency telephone number

1.4.1 Telephone number, name and address

09-4711

direct number +358 9 471 977

HUS / Myrkytystietokeskus

PL 340, 00029 HUS, Suomi

09-471 977

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Hazardous components

| 2.1.1 CAS number or other code | 2.1.2 Chemical name of the substance | 2.1.3 Concentration | 2.1.4 Warning symbol, R phrases and other information |
|---|--|--------------------------------|--|
| 1310-58-3 | Potassium hydroxide | 5-15% | C; R35 |
| 7681-52-9 | Sodium hypochlorite solution, activ chlorine matter | 3,0% | C; R31-34 |

3. HAZARDS IDENTIFICATION

The product is classified as corrosive.C;R35

4. FIRST AID MEASURES

4.1 Additional advice

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4.2 Inhalation

Consult a physician. Move to fresh air.

4.3 Skin contact

Consult a physician. Take off all contaminated clothing immediately. Wash off immediately with plenty of water.

4.4 Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.5 Ingestion

Consult a physician. Do not induce vomiting. Rinse mouth. Drink plenty of water.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

The product in itself is incombustible.

5.2 Extinguishing media which must not be used for safety reasons

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5.3 Special exposure hazards in a fire

When the product reacts with metal, be freed hydrogen, which can make explosive mixture with air.

5.4 Special protective equipment for firefighters

complete suit protecting against chemicals, self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Use personal protective equipment.

6.2 Environmental precautions

Should not be released into the environment. Prevent product from entering drains.

6.3 Methods for cleaning up

Small amounts: Flush with plenty of water.

7. HANDLING AND STORAGE

7.1 Handling

Handle and open container with care. Product resists ignition and does not promote flame spread. Used as structural materials plastic a.o. PE and PVC, titanium and some reinforced plastics endure the product.

7.2 Storage

Do not store near acids Keep tightly closed in a dry and cool place. Keep at temperatures above 0°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Limit Values

8.1.1 Exposure limit(s)

| CAS-No. | Chemical name of the substance | . | . |
|-----------|--------------------------------|---------------------------|---|
| 1310-58-3 | Potassium hydroxide | . | . |
| | | 2 mg/m ³ (8 h) | . |

8.2 Exposure controls

8.2.1 Occupational exposure controls

Avoid contact with the skin and the eyes.

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8.2.1.1 Respiratory protection

Half mask with a particle filter P2 (European Norm EN 143 = former DIN 3181)

8.2.1.2 Hand protection

Neoprene gloves nitrile rubber PVC or other plastic material gloves

8.2.1.3 Eye protection

face-shield, Eye wash bottle with pure water

8.2.1.4 Skin and body protection

Chemical resistant apron, protective suit

8.2.2 Environmental exposure controls

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General Information (appearance, odour)

yellow, clear, slight chlorine liquid

9.2 Important Health Safety and Environmental Information

| | | |
|----------------|---|-------------------------|
| 9.2.1 | pH | 14 |
| 9.2.2 | Boiling point/range | - |
| 9.2.3 | Flash point | - |
| 9.2.5 | Explosive properties | - |
| 9.2.5.1 | Lower explosion limit | - |
| 9.2.5.2 | Upper explosion limit | - |
| 9.2.7 | Vapour pressure | - |
| 9.2.8 | Relative density | 1,18 kg/dm ³ |
| 9.2.9 | Solubility | - |
| 9.2.9.1 | Water solubility | totally soluble |
| 9.2.9.2 | Fat solubility (solvent - oil to be specified) | - |
| 9.2.10 | Partition coefficient (n-octanol/water) | - |

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid

Burning produces obnoxious and toxic fumes. Temperatures above +20 °C.

10.2 Materials to avoid

light metals

10.3 Hazardous decomposition products

May develop chlorine if mixed with acidic solutions.

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

LD50/oral/mouse=5800 mg/kg sodium hypochlorite
LD50/oral/rat= 365 mg/kg potassium hydroxide

11.2 Irritation and corrosion

Alkaline solution causes necrosis to tissue.

11.3 Sensitisation

-

11.5 Human experience

-

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity effects

12.1.1 Aquatic toxicity

LC50 = 80-85 mg/l *Gambusia affinis*, 95h ,potassium hydroxide

LC50/96h/Sheephead minnows =5,9 mg/l , LC50/96h/rainbow trout =0,07 mg/l(Cl2) sodium hypochlorite

12.1.2 Toxicity to other organisms

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12.2 Mobility

No data is available on the product itself.

12.3 Persistence and degradability

12.3.1 Biological degradability

-

12.3.2 Chemical degradation

-

12.4 Bioaccumulative potential

-

13. DISPOSAL CONSIDERATIONS

Small amounts should be diluted with plenty of water.

14. TRANSPORT INFORMATION

| | | |
|----------|--------------------------|------------------------------|
| 14.1 | UN-No | UN1814 |
| 14.2 | Packing group | II |
| 14.3 | Land transport | |
| 14.3.1 | ADR/RID | 8,II |
| 14.3.2 | Risk code | 80 |
| 14.3.3 | Description of the goods | KALIUMHYDROKSIDILIUOS |
| 14.3.4 | Further Information | K07 |
| 14.4 | Sea transport | |
| 14.4.1 | IMDG | IMO 8 |
| 14.4.2 | Proper technical name | POTASSIUM HYDROXIDE SOLUTION |
| 14.4.2.3 | Packing group | PG II |
| 14.4.2.4 | Marine pollutant | - |
| 14.4.2.6 | IMO-Labels | Corrosive 8 |
| 14.4.3 | Further Information | Cefic 53 |

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

C Corrosive

15.1.2 Names of the ingredients given on the warning label

Potassium hydroxide

15.1.3 R-phrase(s)

R35 Causes severe burns.

15.1.4 S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

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S45

In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

S50

Do not mix with acid

16. OTHER INFORMATION

16.1 Text of R phrases mentioned in Section 2

R31 Contact with acids liberates toxic gas.

R34 Causes burns.

R35 Causes severe burns.

16.2 Training advice

Look at label or leaflet.

16.4 Further Information

Registered office and domicile: Noiro Corporation, Lasikuja 2, FIN-02780 ESPOO

16.5 Literary reference

Sax, Lewis: "Dangerous properties of Industrial materials"

Safety Data Sheets of rawmaterials.

STMp 624/01

Exposure values 2002

16.6 Additions, Deletions, Revisions

Safety Data Sheet has been changed.