



SAFETY DATA SHEET

Material Safety Data Sheet complies with Regulation (EC) No 1907/2006 REACH (the European Parliament and Council Regulation No

Registration, Evaluation, Authorisation and Restriction), the requirements of Annex II.

SECTION 1: Identification of the substance or mixture and company

Release Date 04/16/2015

1.1. Product identifier

Product Name SLIPGUARD

1.2 Relevant identified uses of the substance or mixture and uses advised against recommend

Activity

Slip resistant aggregate-based surfaces.

Tukes use of code (KT)

61 surface treatment agents.

1.3 Details of the supplier

Company Name

SlipGuard Europe, PL5 40 801 Vaajakoski Finland

Phone: +358 500 540285

E-mail: contact@slipguard-europe.com

Web page: <http://www.slipguard-europe.com>

Business ID FI26153013

1.4. Emergency telephone number

Emergency telephone number: +358 9 471977

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification 67/548 / EEC, or

In accordance with Directive 1999/45 / EC

C, Xn; R22, R34

Classification according to Regulation (EC) No

In accordance with the 1272/2008 [CLP / GHS]

Skin Corr 1B; H314

Acute tox. 4; H302

2.2. Labelling

Warning signs (CLP)



Label information

Ammoniumbifluorid: <10%

Attention Words

Danger

Hazard

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

Precautionary statements

P260 Do not breathe dust / fume / gas / mist / vapors / spray.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

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P301 + P330 + P331 IF SWALLOWED: Rinse mouth.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Flush / spray the skin with water.

P305 + P351 + P338 IF IN EYES: Rinse thoroughly with water for several minutes. Remove contact lenses, if it can be done easily. Continue rinsing.

P313 Get medical advice.

2.3. Other hazards

SECTION 3: Composition and Information on Ingredients

3.2. Mixtures

Ammoniumbifluoride

CAS 1341-49-7

EC number: 215-676-4

Index number: 009-009-00-4

T; R25

C; R34

Acute tox. 3; H301

Skin Corr. 1B; H314

<10%

2-butoxyethanol

CAS number: 111-76-2

EC number: 203-905-0

Index number: 603-014-00-0

Synonyms: 2-butoxyethanol

Xn; R20 / 21/22

Xi; R36 / 38

Acute tox. 4; H332

Acute tox. 4; H312

Acute tox. 4; H302

Eye Irrit. 2; H319

Skin Irrit. 2; H315

<5%

SECTION 4: First aid measures

4.1. First aid measures

General Information: In case of accident or if symptoms persist or if you feel unwell seek medical advice immediately (show the label or this safety data sheet if possible).

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed.

Skin contact: Skin wash immediately with soap and plenty of water removing contaminated clothes and shoes.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes. Call a physician if irritation persists.

Ingestion: Rinse mouth. Do not induce vomiting. Call a physician immediately. Drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

General symptoms and effects: May cause fluoride poisoning.

4.3 Immediate medical attention and special treatment needed (if necessary)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing equipment

Water.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire may form highly toxic and corrosive fluorine compounds vapors and flue gases containing.

5.3. Advice for firefighters

Personal Protective Equipment

Compressed air used in fire or breathing apparatus, full protective equipment.

SECTION 6: Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures

General measures

Ensure adequate air ventilation. Wear Personal protective equipment.

6.2. Environmental precautions

Prevent large quantities entering drains, soil or bodies of water.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up: Rinse with water.

6.4 Reference to other sections

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Processing

Avoid contact with the skin, eyes and clothing. Keep container away of large temperature variations.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Container tightly closed in a dry and cool place.

7.3 Specific end use

SECTION 8: Exposure controls and personal protection

8.1 Control parameters

Occupational exposure limits and other statutory specifications

Ingredient name, Identification, Worth, Year

Ammoniumbifluoride

CAS 1341-49-7

EC number: 215-676-4

Index number: 009-009-00-4

2-butoxyethanol

CAS number: 111-76-2

EC number: 203-905-0

Index number: 603-014-00-0

Synonyms: 2-butoxyethanol

8 hours (TWA): 20 ppm

8 hours (TWA): 98 mg / m³

15 min .: 50 ppm

15 min .: 250 mg / m³

skin 2011

8.2 Exposure controls

Respiratory protection

Respiratory protection: Use appropriate respiratory protection if ventilation is inadequate.

Hand protection

Hand protection: Rubber or plastic gloves.

Eye and face protection

Eye Protection: Tightly fitting safety goggles

Skin protection

Skin protection (other than of the hands): Protective Clothing

Appropriate environmental exposure control

Environmental exposure controls: Do not discharge into the environment

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State

Liquid.

Color

Clear.

Smell

Odorless.

pH (delivery form)

Value: 4.6

Initial boiling point and range

Value: 100 ° C

Vapour pressure

Value: 17.2 mm Hg

Solubility in water: Dissolves completely in water

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

10.4 Conditions to avoid

Conditions to avoid: Protection against extreme temperature fluctuations.

10.5. Incompatible materials

10.6 Hazardous decomposition products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Oral LD50

Value: 130 mg / kg

Test animals: Rat

Reference: Ammoniumbifluoride

Oral LD50

Value: 560 mg / kg

Test animals: Rat

Reference: 2-butoxyethanol

LD50 through the skin

Value: 220 mg / kg

Test animals: Rabbit

LC50 inhalation

Value: 2210 mg / m³

Test animals: Rat

Duration: 4h

Reference: 2-butoxyethanol

Other information regarding health hazards

General Information: Continued exposure can lead to fluoridepoisonin, cause bone abnormalities.

The mixture of acute toxicity estimate

Orally

Dangerous by ingestion. Ingestion causes severe swelling of the tissues, severe tissue damage fragile and the risk of corrosion; as a result the mucous membranes of the mouth, esophagus and gastric intestinal burns, severe pain, vomiting, convulsions.

Through the skin Causes burns. Exposure may be a significant corrosive effect on all the body tissues.

Potential immediate effects

Irritation: May cause irritation to skin and eyes slightly high vapor concentrations

Inhalation may irritate the respiratory system.

Delayed effects

General

Repeated exposure to a solution can cause contact dermatitis, enamel the teeth and / or ocular and respiratory inflammation.

SECTION 12: Ecological information

12.1 Toxicity

Acute effect of river fish

Value: 137 mg / l

Fish species: Brachydanio rerio, zebra fish

Duration: LC0 / 96h

Reference: Ammoniumbifluoride

Acute watershed impact, green algae

Value: 35 mg / l

The algae, species: Microcystis aeruginosa, blue-green

Toxicity, seafood

LC50 / 96 / seafood (Crangon crangon) = 550-950 mg / l.

Chemical Toxicology

12.2 Persistence and degradability

Biodegradation

Value: 95%

Test Period: 28vrk

Testing method: OECD 301E Test (2-butoxyethanol)

12.3 Bioaccumulative

Potential for bioaccumulation

2-Butoxyethanol: log POW = 0.81 (25 ° C)

12.4 Mobility in soil

Mobility: Ammoniumbifluoride: Soluble in water, 630 g / l (20 ° C), and spreads with water.

2-butoxyethanol: Miscible with water, and spreads with water.

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

comments: Not to be released into the surface water or groundwater.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Hazardous waste (packaging). Completely emptied containers, with no drops or other residues, e.g., industrial waste can be treated, and possibly recycled. Hazardous waste (product)

Dispose of as hazardous waste in compliance with local and national regulations e.g. providing in an appropriate hazardous waste treatment facility, which is responsible for authorities; (Ekokem Oy).

SECTION 14: Transport information

14.1. UN number

ADR 2817

RID 2817

IMDG 2817

ICAO / IATA 2817

14.2 UN proper shipping name

ADR AMMONIUMVETYDIFLUORIDE SOLUTION

RID AMMONIUMVETYDIFLUORIDE SOLUTION

IMDG AMMONIUM SOLUTION HYDROGENDIFLUORIDE

ICAO / IATA AMMONIUM SOLUTION HYDROGENDIFLUORIDE

Remark

ADR / RID-Labels 8 + 6.1

14.3 Transport hazard class

ADR

8 (6.1)

Hazard Classification

86

RID

8 (6.1)

IMDG

8 (6.1)

ICAO / IATA

8 (6.1)

14.4 Packing group

ADR II

14.5 Environmental hazards

14.6 Special precautions for user

EmS

FA, SB

14.7 Transport in bulk MARPOL 73/78, Annex II and the agreement of the IBC Code in accordance with

SECTION 15: Regulatory information

15.1 Safety, health and the substance or mixture environmental regulations or legislation,

15.2 Chemical Safety Assessment

SECTION 16: Other information

R-Phrases

R22 Harmful if swallowed.

R34 Causes burns.

Editor's comment

The information in this safety data sheet are based on the information that is our current data and is given as

provided that the product is used under normal conditions and in harmony the packaging or in the technical literature as defined in

according to usage patterns. Other use, poss. In combination with other product with products or processes, is at the user's own risk.

Classification according to Regulation (EC) No

In accordance with the 1272/2008 [CLP / GHS]

Acute tox. 4; H302;

Skin Corr 1B; H314;

A list of used R-phrases

(sections 2 and 3).

R36 / 38 Irritating to eyes and skin.

R20 / 21/22 Harmful by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

R25 Toxic if swallowed.

R22 Harmful if swallowed.

A list of used H-phrases

(Parts 2 and 3).

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H301 Toxic if swallowed.

Training Advice

Training of employees, handling of corrosive substances

The main

Material Safety Data Sheet

used to create sources

Substance supplier MSDS

Version 1

Responsible for

Material Safety Data Sheet

SlipGuard Europe

