Lime and grout remover

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier: Alfix Lime and grout remover
1.2 Relevant identified uses of the substance or mixture and uses advised against:
Used as cleaning agent.

1.3 Details of the supplier of the safety data sheet:

Alfix A/S
H.C. Ørstedsvej 11-13
DK-6000 Kolding
Tel.: +45 75 52 90 11
Fax: +45 75 50 40 11
e-mail: alfix@alfix.dk
Contact person: Allan Nielsen / Frank Pingel

1.4 Emergency telephone number
+45 75 52 90 11 (Alfix)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

According to CLP (1272/2008)
Skin Corr. 1A; H314: Causes severe skin burns and eye damage.

2.2 Label elements

Labelling according to CLP (1272/2008)

Signal Word: Danger.

Causes severe skin burns and eye damage. (H314)

Wear protective gloves/protective clothing/eye protection/face protection. (P280)
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. (P301+P330+P331)
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353)
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Wash contaminated clothing before reuse. (P363)
Store locked up and keep out of reach of children. (P405+102)

Contains:
5 – 15% Phosphoric acid.
< 5% Nonionic surfactants

Other labelling:
-

2.3 Other hazards:
None known.
PBT/vPvB: The substances are not PBT/vPvB according to the criteria in Annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Substances: -
Mixtures:

Substances: - Mixtures:	CAS-No.	EC-No.	Index-No.	Content-%	REACH reg.No	Classification
Phosphoric acid	7664-38-2	231-633-2	015-011-00-6	15 – 30 %	02-2119675273-35-0000	Met. Corr. 1, H290 ; Skin Corr. 1B, H314 ; Eye Dam. 1, H318
Citric Acid	5949-29-1	201-069-1	-	< 5 %	01-2119457026-42-xxxx	Eye Irrit 2 ; H319
Alcohols, C12-14, ethoxylated propoxylated	68439-51-0	-	-	1-3%	-	-
Isopropanol	67-63-0	200-661-7	603-117-00-0	< 5 %	02-2119666127-35-0000	Flam. Liq. 2; H225, Eye Irrit. 2; H319, STOT SE 3; H336

CLP*: Regulation (EC) No 1272/2008 of the European Parliament and of the Council
For the full text of H-phrases see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

Inhalation:
Bring the injured to fresh air. **Mild cases:** Keep the injured in rest under supervision. In case of discomfort: Contact a doctor.
Severe cases: Move the unconscious person into recovery position and keep warm with head kept low. If breathing has stopped,
begin artificial respiration. Seek medical advice or call an ambulance immediately.

Skin contact:
Remove contaminated clothing. Wash then the skin carefully with water and soap. Use suitable lotion to moisturize skin. If irritation persists, seek medical advice.

Eye contact:
Rinse wide opened eye immediately with water or physiological saltwater for at least 15 minutes. Remove contact lenses. If irritation persists or recurs seek medical advice.

Ingestion:
Immediately rinse mouth carefully and drink plenty of water. Do not induce vomiting. Drink water or milk and seek medical advice.
immediately. If it is not possible to get immediately medical attention: Do not induce vomiting. Keep the head low to avoid the content
from the stomach to reach the lungs. Seek medical advice.

Burn:
Not relevant. Product is not flammable.

4.2 Most important symptoms and effects, both acute and delayed:
No further information available.

4.3 Indication of any immediate medical attention and special treatment needed:
Unconsciousness: Seek medical advice or call an ambulance immediately. Show this Material Safety Data Sheet to the doctor or at the emergency room.

SECTION 5: Firefighting measures

5.1 Extinguishing media:
Carbon dioxide, alcohol resistant foam or powder. Do not use water fog or water spray.

5.2 Special hazards arising from the substance or mixture:
Product is not flammable. During a fire, harmful smoke will be developed.

5.3 Advice for firefighters:
Remove container if possible, or cool with water. Use breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
Personal equipment: See section 8. Ventilate well.

6.2 Environmental precautions:
Prevent access to drains, sewers, waterways and soil. See section 12.

6.3 Methods and material for containment and clearing up:

Absorb with liquid-binding material (sand, sawdust). Rinse carefully with water. Disposal: See section 13.

6.4 References to other sections:
See above.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:
Avoid contact with skin and eyes. Wash immediately when skin is contaminated. Access to running water and eye rinse.

7.2 Conditions for safe storage, including any incompatibilities:
Keep only in the original container, tightly closed. Store in a cool, well ventilated, dry place.
Keep away from food, drinks and animal feed.

7.3 Specific end use(s):
See use of the substance in section 1.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:
Phosphoric acid: - ppm / 1 mg/m³
Isopropanol: 1 ppm / 2.5 mg/m³
DNEL: No CSR
PNEC: No CSR

8.2 Exposure controls:
Appropriate engineering controls:
None.

8.3 Individual protection measures, such as personal protective equipment:
Respiratory protection: Not required.
Skin protection: Use protection gloves of e.g. PVC, neoprene or vinyl. There is no time for glove penetration, therefore change gloves,
when it is contaminated.
Eye protection: Use eye protection to avoid the product getting into the eyes

8.4 Environmental exposure controls:
Disposal in accordance with local authority requirements. See section 13.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:
Appearance: Liquid.
Odour: -
Odour threshold: -
pH:1
Melting point/freezing point: -
Initial boiling point and boiling range: -
Flash point:-
Evaporation rate: -
Flammability (solid, gas): -
Upper/lower flammability or explosive limits: -
Vapour pressure: -
Vapour density: -
Relative density: 1.09 g/cm³
Solubility(ies): Soluble
Partition coefficient: n-octanol/water: -
Auto-ignition temperature: -
Decomposition temperature: -
Viscosity: -
Explosive properties: -
Oxidising properties: -

9.2 Other information: -

SECTION 10: Stability and reactivity

10.1 Reactivity:
Stable under normal condition

10.2 Chemical stability:
Stable under recommended storing.

10.3 Possibility of hazardous reactions:
None.

10.4 Conditions to avoid:
None.

10.5 Incompatible materials:
None.

10.6 Hazardous decomposition products:
None.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Substance	Species	Test	Exposure	Result
Propan-2-ol	Rabbit	LD50	Dermal	12800 mg/kg bdw
Propan-2-ol	Rat	LD50	Oral	5045 mg/kg bdw
Propan-2-ol	Rat	LD50	Inhalation	16000 ppm/8h
Citric acid	Rat	LD50	Oral	> 6730 mg/kg
Citric acid	Rabbit	LD50	Oral	> 7000 mg/kg
Citric acid	Mice	LD50	Oral	5400 mg/kg
Phosphoric acid	Rat	LD50	Oral	1530 mg/kg
Phosphoric acid	Rabbit	LD50	Dermal	2740 mg/kg
Phosphoric acid	Rat	LD50	Inhalation	> 840 mg/m³/1h

Information on likely routes of exposure: Through ingestion, inhalation and skin exposure.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:
Exposure may cause cough, shortness of breath and/or headache and / or nausea.
Skin contact:
Contact may cause skin irritation or skin burns.
Eye contact:
Can in consequence cause eye damage or eye irritation with pain and redness.
Ingestion:
Unlikely however if ingested it will give irritation. May cause nausea, discomfort and vomiting
Repeated and immediate effects as well as chronic effects from short and long time exposure:
None known.

SECTION 12: Ecological information

12.1 Toxicity:

Substance	Species	Test	Time period	Result
Propan-2-ol	Alger	EC50	24h	1000000 µ/l
Propan-2-ol	Fisk	IC50	48h	1400000 µ/l
Citric acid	Dafnier	EC0	-	80 mg/l
Citric acid	Fisk	EC0	-	625 mg/l
Citric acid	Alger	EC0	-	640 mg/l
Phosphoric acid	Fisk	LC50	96h	138 ppm
Phosphoric acid	Fisk	EC50	48h	> 100 mg/l
Phosphoric acid	Alger	EC50	72h	> 100 mg/l
Alcohols, C12-14, ethoxylated propoxylated	Dafnier	EC50	-	1-10 mg/l
Alcohols, C12-14, ethoxylated propoxylated	Alger	EC50	48h	1-10 mg/l
Alcohols, C12-14, ethoxylated propoxylated	Fisk	LC50	72h	2,6 mg/l

12.2 Persistence and degradability
The Surfactants are readily biodegradable as determined by the OECD 301 test B+D (> 60% CO2/BOD, 28 days)

12.3 Bioaccumulative potential:
Alcohols,C9-11, ethoxylated: Log KOW 3.6 – No relevant bioaccumulation.

12.4 Mobility in soil:
Propan-2-ol isopropylalkohol...: Log Koc= 0.117995 (Potentially hig mobility)

12.5 Results of PBT and vPvB assessment:
The substances are not PBT/vPvB according to the criteria in Annex XIII.
12.6 Other adverse effects:
By major spill, pH could be decreased with subsequent risk of fish dead.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:
Disposal of in accordance with local authority requirements.
13.2 EWC-code:
200129

SECTION 14: Transport information

The product is considered as dangerous goods.
14.1 UN-number: 1760
14.2 UN proper shipping name: Land transport (ADR/RID)
Corrosive liquid, n.o.s (Phosphoric acid)
Sea transport (IMDG) Corrosive liquid, n.o.s (Phosphoric acid)
Air transport (ICAO-TI / IATA-DGR)
Corrosive liquid, n.o.s (Phosphoric acid)
14.3 Transport hazard class(es):
Land transport (ADR/RID)
Class(es) : 8
(Kemler No.) : 80
Tunnel restriction code : E
Special provisions : LQ 7 · E 1
Hazard label(s) : 8
Sea transport (IMDG)
Class(es) : 8
EmS-No. : F-A / S-B
Hazard label(s) : 8
Air transport (ICAO-TI / IATA-DGR)
Class(es) : 8
Special provisions : E 1
Hazard label(s) : 8
14.4 Packing group: III
14.5 Environmental hazards:
Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No
14.6 Special precautions for user: None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
No information available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
No Special education/training requirements, but knowledge to of this Material Safety Data Sheet ought to be a requirement.
EU-directive 2004/42/EF
There can be local authority requirements.
15.2 Chemical safety assessment:
No CSA

SECTION 16: Other information

The given R-phrase and H-phrase in chapter 2 and 3 are to read as follows:

H225: Highly flammable liquid and vapour
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage
H318: Causes serious eye damage
H319: Causes serious eye irritation
H336: May cause drowsiness or dizziness