SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Nilfisk Roof Cleaner
Product no.
125300389
REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Chemicals for retail sale
Uses advised against
-
The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Nilfisk A/S
Kornmarksvej 1
Brøndby
DK-2605
Tlf.: +45 43 23 40 50
Contact person
-
E-mail
-
SDS date
2016-10-31
SDS Version
3.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

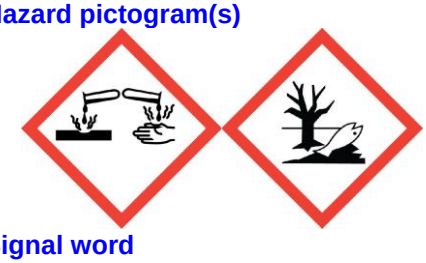
SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Corr. 1B; H314
Eye Dam. 1; H318
Aquatic Acute 1; H400
Aquatic Chronic 2; H411
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)



Signal word
Danger
Hazard statement(s)
Causes severe skin burns and eye damage. (H314)

Very toxic to aquatic life. (H400)
Toxic to aquatic life with long lasting effects. (H411)

Safety statement(s)

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Do not breathe mist/vapours/fume/spray. (P260).
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353).
Storage	Store locked up. (P405).
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

Alkyldimethylbenzylammoniumchlorid, Fedtalkoholethoxylat

2.3. Other hazards

-

Additional labelling

-

Additional warnings

Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.

VOC

-

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME:	Alkyldimethylbenzylammoniumchlorid
IDENTIFICATION NOS.:	CAS-no: 85409-22-9 EC-no: 287-089-1
CONTENT:	5-10%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1 H302, H314, H318, H400, H410 (M-acute = 10) (M-chronic = 1)

NAME:	Fedtalkoholethoxylat
IDENTIFICATION NOS.:	CAS-no: 69011-36-5 EC-no: - REACH-no: 02-2119549526-31-0000
CONTENT:	1-3%
CLP CLASSIFICATION:	Eye Dam. 1, Acute Tox. 4 H318, H302

NAME:	propan-2-ol isopropyl alcohol isopropanol
IDENTIFICATION NOS.:	CAS-no: 67-63-0 EC-no: 200-661-7 Index-no: 603-117-00-0
CONTENT:	<1%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336
NOTE:	S

(*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.
S = Organic solvent

Other information

ATEmix(inhale, vapour) > 20
ATEmix(inhale, dust/mist) > 20
ATEmix(inhale, dust/mist) > 20000
ATEmix(dermal) > 2000
ATEmix(oral) > 2000
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 2,5144 - 3,7716
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 6,96 - 10,44
N chronic (CAT 2) Sum = Sum(Ci/M(chronic)i*25*0.1*10^CATi) = 2,784 - 4,176
N acute (CAT 1) Sum = Sum(Ci/M(acute)i*25) = 2,784 - 4,176
Detergent:
5 - 15%: CATIONIC SURFACTANTS
< 5%: NON-IONIC SURFACTANTS

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

▼Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

4.2. Most important symptoms and effects, both acute and delayed

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

No special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

▼6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

No data available.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit.

DNEL / PNEC

DNEL (Alkyldimethylbenzylammoniumchlorid): 5,7 mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (Alkyldimethylbenzylammoniumchlorid): 3,96 mg/kg/day
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers
DNEL (Alkyldimethylbenzylammoniumchlorid): 3,4 mg/kg/day
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population
DNEL (Alkyldimethylbenzylammoniumchlorid): 3,4 mg/kg/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population
DNEL (Alkyldimethylbenzylammoniumchlorid): 1,64 mg/kg/day
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

PNEC (Alkyldimethylbenzylammoniumchlorid): 0,0009 mg/L
Exposure: Freshwater
PNEC (Alkyldimethylbenzylammoniumchlorid): 0,00096 mg/L
Exposure: Marine water
PNEC (Alkyldimethylbenzylammoniumchlorid): 0,00016 mg/L
Exposure: Intermittent release
PNEC (Alkyldimethylbenzylammoniumchlorid): 12,27 mg/kg
Exposure: Freshwater sediment
PNEC (Alkyldimethylbenzylammoniumchlorid): 13,09 mg/kg
Exposure: Marine water sediment
PNEC (Alkyldimethylbenzylammoniumchlorid): 7 mg/kg
Exposure: Marine water sediment
PNEC (Alkyldimethylbenzylammoniumchlorid): 0,4 mg/L
Exposure: Sewage Treatment Plant

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Recommended: S/SL. P2 . White

Skin protection

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.

Hand protection

Recommended: Nitrile rubber. See the manufacturer's instructions.

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Clear
Odour	Characteristic
pH	8,0
Viscosity (40°C)	No data available.
Density (g/cm³)	0,996

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

Data on fire and explosion hazards

Flashpoint (°C)	No data available.
Ignition (°C)	No data available.
Self-ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.

Solubility

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
propan-2-ol isopropyl alcoho...	Rabbit	LD50	Dermal	12800 mg/kg bdw
propan-2-ol isopropyl alcoho...	Rat	LD50	Oral	5045 mg/kg bdw
propan-2-ol isopropyl alcoho...	Rat	LC50	Inhalation	16000 ppm/8h
Fedtalkoholethoxylat	Rat	LD50	Oral	> 500 - 2000 mg/kg
Fedtalkoholethoxylat	Rat	LD50	Dermal	> 4000 mg/kg
Alkyldimethylbenzylammoniumchl...	Rat	LD50	Oral	397,5 mg/kg
Alkyldimethylbenzylammoniumchl...	Rabbit	LD50	Dermal	3412 mg/kg

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Data on substance: Alkyldimethylbenzylammoniumchlorid
Test: no guideline followed
Organism: -
Result: ætsende virkninger på hud og slimhinde

Serious eye damage/irritation

Causes serious eye damage.

Data on substance: Alkyldimethylbenzylammoniumchlorid
Test: no guideline followed
Result: Virker stærkt ætsende

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

Data on substance: Fedtalkoholethoxylat
No adverse effect observed.

Data on substance: Alkyldimethylbenzylammoniumchlorid
No adverse effect observed.

Carcinogenicity

Data on substance: Fedtalkoholethoxylat
No adverse effect observed.

Reproductive toxicity

Data on substance: Fedtalkoholethoxylat
No adverse effect observed.

Data on substance: Alkyldimethylbenzylammoniumchlorid
No adverse effect observed.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

Data on substance: Alkyldimethylbenzylammoniumchlorid
No adverse effect observed.

Long term effects

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, -irritations and burns in the respiratory organs -as well as coughing. Dermal contact and contact with the eye cause irreversible effects.
Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Duration	Result
propan-2-ol isopropyl alcoho...				
propan-2-ol isopropyl alcoho...				
Fedtalkoholethoxylat	Algae	EC50	24 h	1000000 ug/L
Fedtalkoholethoxylat	Fish	LC50	48 h	1400000 ug/L
Fedtalkoholethoxylat	Fish	LC50	96 h	10 - 100 mg/L
Alkyldimethylbenzylammoniumc	Daphnia	EC50	48 h	10 - 100 mg/L
hl...	Algae	EC50	72 h	10 - 100 mg/L
Alkyldimethylbenzylammoniumc	Fish	LC50		0,515 mg/l
hl...	Daphnia	EC50		0,016 mg/l
Alkyldimethylbenzylammoniumc	Algae	IC50		0,03 mg/l
hl...	Algae	NOEC		0,009 mg/l
Alkyldimethylbenzylammoniumc				
hl...				

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Fedtalkoholethoxylat	Yes	No data available	No data available
Alkyldimethylbenzylammoniumc	Yes	No data available	No data available
hl...			

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
propan-2-ol isopropyl alcoho...	No	0,05	No data available
Fedtalkoholethoxylat	No	No data available	No data available

12.4. Mobility in soil

propan-2-ol isopropyl alcoho...: Log Koc= 0,117995 (High mobility potential.).

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms. This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

20 01 29 detergents containing dangerous substances

Specific labelling

-

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

14.1. UN number	3082
14.2. UN proper shipping name	CORROSIVE LIQUID, N.O.S.
14.3. Transport hazard class(es)	9
14.4. Packing group	III
Notes	-
Tunnel restriction code	E

IMDG

UN-no.	3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Benzalkoniumchloride)

Class	9
PG*	III
EmS	F-A, S-B
MP**	Yes
Hazardous constituent	-

IATA/ICAO

UN-no.	3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Benzalkoniumchloride)
Class	9
PG*	III

14.5. Environmental hazards

This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Demands for specific education

-

Additional information

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).
EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H225 - Highly flammable liquid and vapour.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

-

Other symbols mentioned in section 2

-

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

MH

Date of last essential change
(First cipher in SDS version)

2016-09-30

Date of last minor change
(Last cipher in SDS version)

2016-09-30