

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Nilfisk Sapphire_105301661_105301662_105301663

Product no.

105301661_105301662_105301663

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 industrial purposes

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

2017-07-12

SDS Version

2.0

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

Acute Tox. 4; H302
Skin Irrit. 2; H315
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)

Harmful if swallowed. (H302)
 Causes skin irritation. (H315)
 Causes serious eye damage. (H318)
 Very toxic to aquatic life. (H400)
 Toxic to aquatic life with long lasting effects. (H411)

▼ Safety statement(s)

General -
Prevention - Avoid release to the environment. (P273).
 Wear protective gloves/protective clothing. (P280).
Response - Immediately call a POISON CENTER/doctor. (P310).
 Collect spillage. (P391).
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage -
Disposal -

▼ Identity of the substances primarily responsible for the major health hazards

Fatty alcohol ethoxylate, Tetrasodium, ethylenediaminetetraacetate, Alkyldimethylbenzylammonium Chloride, Potassium Hydroxide, CMIT/MIT

2.3. Other hazards

-

Additional labelling

-

Additional warnings

VOC

-

SECTION 3: Composition/information on ingredients

▼ 3.1/3.2. Substances/Mixtures

NAME:	Fatty alcohol ethoxylate
IDENTIFICATION NOS.:	CAS-no: 69011-36-5 EC-no: - REACH-no: 02-2119549526-31-0000
CONTENT:	15-25%
CLP CLASSIFICATION:	Eye Dam. 1, Acute Tox. 4 H318, H302
NAME:	Tetrasodium, ethylenediaminetetraacetate
IDENTIFICATION NOS.:	CAS-no: 64-02-8 EC-no: 200-573-9 Index-no: 607-428-00-2
CONTENT:	3-5%
CLP CLASSIFICATION:	Acute Tox. 4, Eye Dam. 1 H302, H318, H332
NAME:	Alkyldimethylbenzylammonium Chloride
IDENTIFICATION NOS.:	CAS-no: 85409-22-9 EC-no: 287-089-1
CONTENT:	3-5%
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:	2-phosphobutane-1,2,4-tricarboxylic, acid
IDENTIFICATION NOS.:	CAS-no: 37971-36-1 EC-no: 253-733-5
CONTENT:	1-3%
CLP CLASSIFICATION:	Met. Corr. 1, Eye Irrit. 2 H290, H319
NAME:	Potassium Hydroxide
IDENTIFICATION NOS.:	CAS-no: 1310-58-3 EC-no: 215-181-3 Index-no: 019-002-00-8
CONTENT:	<1%
CLP CLASSIFICATION:	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A H290, H302, H314
NAME:	Colour
IDENTIFICATION NOS.:	-
CONTENT:	<0.0015%
CLP CLASSIFICATION:	NA

NAME:	CMIT/MIT
IDENTIFICATION NOS.:	CAS-no: 55965-84-9 Index-no: 613-167-00-5
CONTENT:	<0.0001%
CLP CLASSIFICATION:	Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1 H301, H311, H314, H317, H331, H400, H410

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

Other information

ATEmix(inhale, vapour) > 20
 ATEmix(inhale, dust/mist) > 20000
 ATEmix(dermal) > 2000
 ATEmix(oral) = 1538,112 - <= 2000
 Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 3,3056 - 4,9584
 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3,6144 - 5,4216
 N chronic (CAT 2) Sum = Sum(Ci/M(chronic))*25*0.1*10^CATi) = > 1 - 1,4928
 N acute (CAT 1) Sum = Sum(Ci/M(acute))*25) = > 1 - 1,4928
 Detergent:
 15 - 30%: NON-IONIC SURFACTANTS
 < 5%: EDTA AND SALTS THEREOF, CATIONIC SURFACTANTS, COLORANT, PRESERVATIVE (CMIT/MIT)

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

In the case of ingestion, contact a doctor immediately and bring safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

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

This product contains substances that may trigger an allergic reaction to predisposed persons. 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

IF exposed or concerned:
 Get immediate medical advice/attention.

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 (Alkyldimethylbenzylammonium Chloride): 5,7 mg/kg/day

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Alkyldimethylbenzylammonium Chloride): 3,96 mg/kg/day

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (Alkyldimethylbenzylammonium Chloride): 3,4 mg/kg/day

Exposure: Oral

Duration of Exposure: Long term – Systemic effects - General population

DNEL (Alkyldimethylbenzylammonium Chloride): 3,4 mg/kg/day

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (Alkyldimethylbenzylammonium Chloride): 1,64 mg/kg/day

Exposure: Inhalation

According to EC-Regulation 2015/830

Duration of Exposure: Long term – Systemic effects - General population

PNEC (Alkyldimethylbenzylammonium Chloride): 0,0009 mg/L
 Exposure: Freshwater
 PNEC (Alkyldimethylbenzylammonium Chloride): 0,00096 mg/L
 Exposure: Marine water
 PNEC (Alkyldimethylbenzylammonium Chloride): 0,00016 mg/L
 Exposure: Intermittent release
 PNEC (Alkyldimethylbenzylammonium Chloride): 12,27 mg/kg
 Exposure: Freshwater sediment
 PNEC (Alkyldimethylbenzylammonium Chloride): 13,09 mg/kg
 Exposure: Marine water sediment
 PNEC (Alkyldimethylbenzylammonium Chloride): 7 mg/kg
 Exposure: Marine water sediment
 PNEC (Alkyldimethylbenzylammonium Chloride): 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.

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	Blue
Odour	Characteristic
pH	7,2
Viscosity (40°C)	No data available.
Density (g/cm ³)	1,04
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
CMIT/MIT	Rat	LC50	Inhalation	> 4,62 mg/1/4h
CMIT/MIT	Rabbit	LD50	Dermal	600 mg/kg
CMIT/MIT	Rat	LC50	Oral	457 mg/kg
Potassium Hydroxide	Rat	LD50	Oral	365 mg/kg
2-phosphobutane-1,2,4-tricarbo...	Rat	LD50	Oral	> 6500 mg/kg
2-phosphobutane-1,2,4-tricarbo...	Rat	LD50	Dermal	> 4000 mg/kg
2-phosphobutane-1,2,4-tricarbo...	Rat	LD50	Oral	397,5 mg/kg
2-phosphobutane-1,2,4-tricarbo...	Rabbit	LD50	Dermal	3412 mg/kg
Alkyldimethylbenzylammonium Ch...	Rat	LD50	Oral	> 2000 mg/kg
Alkyldimethylbenzylammonium Ch...	Rat	LD50	Oral	> 500 - 2000 mg/kg
Alkyldimethylbenzylammonium Ch...	Rat	LD50	Dermal	> 4000 mg/kg
Tetrasodium, ethylenediaminete...				
Fatty alcohol ethoxylate				
Fatty alcohol ethoxylate				

▼ Skin corrosion/irritation

Causes skin irritation.

Data on substance: Alkyldimethylbenzylammonium Chloride

Test: no guideline followed

Organism: -

Result: ætsende virkninger på hud og slimhinde

▼ Serious eye damage/irritation

Causes serious eye damage.

Data on substance: Alkyldimethylbenzylammonium Chloride

Test: no guideline followed

Result: Virker stærkt ætsende

Respiratory or skin sensitisation

This product contains substances that may trigger an allergic reaction to predisposed persons.

▼ Germ cell mutagenicity

Data on substance: Alkyldimethylbenzylammonium Chloride
No adverse effect observed.

Data on substance: Fatty alcohol ethoxylate
No adverse effect observed.

▼ Carcinogenicity

Data on substance: Fatty alcohol ethoxylate
No adverse effect observed.

▼ Reproductive toxicity

Data on substance: Alkyldimethylbenzylammonium Chloride
No adverse effect observed.

Data on substance: Fatty alcohol ethoxylate
No adverse effect observed.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

▼ Aspiration hazard

Data on substance: Alkyldimethylbenzylammonium Chloride
No adverse effect observed.

Long term 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
CMIT/MIT				
CMIT/MIT				
CMIT/MIT				
Potassium Hydroxide				
Potassium Hydroxide				
2-phosphobutane-1,2,4-tricarbo...	Fish	LC50	96 h	0,19 mg/L
2-phosphobutane-1,2,4-tricarbo...	Daphnia	EC50	48 h	0,028 mg/L
2-phosphobutane-1,2,4-tricarbo...	Algae	EC50	72 h	0,018 mg/L
2-phosphobutane-1,2,4-tricarbo...	Fish	LC50	48 h	125 mg/L
2-phosphobutane-1,2,4-tricarbo...	Daphnia	EC50	96 h	40-240 mg/L
2-phosphobutane-1,2,4-tricarbo...	Fish	EC0	-	> 1000 mg/L
2-phosphobutane-1,2,4-tricarbo...	Daphnia	EC0	24 h	> 300 mg/L
Alkyldimethylbenzylammonium Ch...	Algae	EC0	72 h	1300 mg/L
Alkyldimethylbenzylammonium Ch...	Fish	LC50		0,515 mg/l
Alkyldimethylbenzylammonium Ch...	Daphnia	EC50		0,016 mg/l
Alkyldimethylbenzylammonium Ch...	Algae	IC50		0,03 mg/l
Alkyldimethylbenzylammonium Ch...	Algae	NOEC		0,009 mg/l
Alkyldimethylbenzylammonium Ch...	Fish	LC50	96 h	> 100 mg/l
Alkyldimethylbenzylammonium Ch...	Daphnia	EC50	48 h	> 100 mg/l
Alkyldimethylbenzylammonium Ch...	Fish	LC50	96 h	10 - 100 mg/L
Tetrasodium, ethylenediaminete...	Daphnia	EC50	48 h	10 - 100 mg/L
Tetrasodium, ethylenediaminete...	Algae	EC50	72 h	10 - 100 mg/L
Fatty alcohol ethoxylate				
Fatty alcohol ethoxylate				
Fatty alcohol ethoxylate				

▼ 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Alkyldimethylbenzylammonium Ch...	Yes	No data available	No data available
Fatty alcohol ethoxylate	Yes	No data available	No data available

▼ 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
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Fatty alcohol ethoxylate

No

No data available

No data available

12.4. Mobility in soil

No data available

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. (Benzalkonium Chloride)

Class

9

PG*

III

EmS

F-A, S-F

MP**

Yes

Hazardous constituent

-

▼ IATA/ICAO**UN-no.**

3082

Proper Shipping Name

Environmentally hazardous substance, liquid, n.o.s. (Benzalkonium Chloride)

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

H290 - May be corrosive to metals.
H301 - Toxic if swallowed.
H302 - Harmful if swallowed.
H311 - Toxic in contact with skin.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H331 - Toxic if inhaled.
H332 - Harmful if inhaled.
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

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Other symbols mentioned in section 2

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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.

According to EC-Regulation 2015/830



The safety data sheet is validated by

MH

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

2016-12-21

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

2016-12-21

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