

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

Nilfisk Acido\_105301622\_105301623

**Product no.**

105301622 105301623

**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.com@nilfisk.com

**SDS date**

2016-12-21

**SDS Version**

1.0

### 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	-
Prevention	Do not breathe mist/vapours/fume/spray. (P260). Wear eye protection/protective clothing/protective gloves. (P280).
Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353). 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

orthophosphorsyre, Alkyldimethylbenzylammoniumchlorid, fatty alcohol alkoxylyate

### 2.3. Other hazards

-

### Additional labelling

-

### Additional warnings

### VOC

-

## SECTION 3: Composition/information on ingredients

### 3.1/3.2. Substances/Mixtures

NAME:	orthophosphorsyre
IDENTIFICATION NOS.:	CAS-no: 7664-38-2 EC-no: 231-633-2 Index-no: 015-011-00-6
CONTENT:	25-40%
CLP CLASSIFICATION:	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1 H290, H314, H318
NOTE:	L
NAME:	Alkyldimethylbenzylammoniumchlorid
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-butoxyethanol
IDENTIFICATION NOS.:	CAS-no: 111-76-2 EC-no: 203-905-0 Index-no: 603-014-00-0
CONTENT:	3-5%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2 H302, H312, H315, H319, H332
NOTE:	SL
NAME:	citronsyre
IDENTIFICATION NOS.:	CAS-no: 77-92-9 EC-no: 201-069-1
CONTENT:	1-3%
CLP CLASSIFICATION:	Eye Irrit. 2 H319
NAME:	fatty alcohol alkoxylyate
IDENTIFICATION NOS.:	CAS-no: - EC-no: Polymer REACH-no: 02-2119552440-48-0000
CONTENT:	1-3%
CLP CLASSIFICATION:	Skin Irrit. 2, Eye Dam. 1 H315, H318
NAME:	2-phosphonobutan-1,2,4-tricarboxylsyre
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

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

## Other information

ATEmix(inhale, vapour) > 20  
 ATEmix(dermal) > 2000  
 ATEmix(oral) > 2000  
 Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 11,2 - 16,8  
 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 6,24 - 9,36  
 N chronic (CAT 2) Sum = Sum(Ci/M(chronic)<sup>i</sup>\*25\*0.1\*10<sup>^</sup>CATi) = 1,152 - 1,728  
 N acute (CAT 1) Sum = Sum(Ci/M(acute)<sup>i</sup>\*25) = 1,152 - 1,728  
 Detergent:  
 < 5%: CATIONIC SURFACTANTS, 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

orthophosphorsyre (EH40, 2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | 1 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | 2 mg/m<sup>3</sup>

#### DNEL / PNEC

DNEL (orthophosphorsyre): 2,92 mg/m<sup>3</sup>

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - Workers

DNEL (orthophosphorsyre): 0,73 mg/m<sup>3</sup>

Exposure: Inhalation

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

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

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### 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

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

### 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	Yellowish
Odour	Sour
pH	0,5
Viscosity (40°C)	No data available.
Density (g/cm <sup>3</sup> )	1,19
<b>Phase changes</b>	
Melting point (°C)	No data available.

Boiling point (°C)	No data available.
Vapour pressure	No data available.
<b>Data on fire and explosion hazards</b>	
Flashpoint (°C)	No data available.
Ignition (°C)	No data available.
Self-ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.
<b>Solubility</b>	
Solubility in water	Soluble
n-octanol/water coefficient	No data available.
<b>9.2. Other information</b>	
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
2-phosphonobutan-1,2,4-tricarb...	Rat	LD50	Oral	> 6500 mg/kg
2-phosphonobutan-1,2,4-tricarb...	Rat	LD50	Dermal	> 4000 mg/kg
2-phosphonobutan-1,2,4-tricarb...	Rat	LD50	Oral	> 6730 mg/kg
2-phosphonobutan-1,2,4-tricarb...	Rabbit	LD50	Oral	> 7000 mg/kg
citronsyre	Mouse	LD50	Oral	5400 mg/kg
citronsyre	Rat	LD50	Oral	1746 mg/kg
citronsyre	Rabbit	LD50	Dermal	2270 mg/kg
2-butoxyethanol	Rat	LD50	Oral	397,5 mg/kg
2-butoxyethanol	Rabbit	LD50	Dermal	3412 mg/kg
Alkyldimethylbenzylammoniumc hl...	Rat	LD50	Oral	1530 mg/kg
Alkyldimethylbenzylammoniumc hl...	Rabbit	LD50	Dermal	2740 mg/kg
Alkyldimethylbenzylammoniumc hl...	Rat	LD50	Inhalation	> 840 mg/m <sup>3</sup> /1 h
orthophosphorsyre				
orthophosphorsyre				
orthophosphorsyre				

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

Data on substance: orthophosphorsyre

Test: no guideline followed

Result: Ætser huden

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

Data on substance: orthophosphorsyre  
 Test: no guideline followed  
 Result: Ætsende stoffer forårsager skader på øjne.

#### Respiratory or skin sensitisation

No data available.

#### Germ cell mutagenicity

Data on substance: Alkyldimethylbenzylammoniumchlorid  
 No adverse effect observed.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

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
2-phosphonobutan-1,2,4-tricarb...				
2-phosphonobutan-1,2,4-tricarb...	Fish	EC0	-	> 1000 mg/L
2-phosphonobutan-1,2,4-tricarb...	Daphnia	EC0	24 h	> 300 mg/L
citronsyre	Algae	EC0	72 h	1300 mg/L
citronsyre	Daphnia	EC0	-	80 mg/L
citronsyre	Fish	EC0	-	625 mg/L
2-butoxyethanol	Algae	EC0	-	640 mg/L
2-butoxyethanol	Fish	LC50	96 h	1490 mg/L
2-butoxyethanol	Daphnia	EC50	24 h	1720 mg/L
Alkyldimethylbenzylammoniumc hl...	Algae	EC0	168 h	900 mg/L
Alkyldimethylbenzylammoniumc hl...	Fish	LC50		0,515 mg/l
Alkyldimethylbenzylammoniumc hl...	Daphnia	EC50		0,016 mg/l
Alkyldimethylbenzylammoniumc hl...	Algae	IC50		0,03 mg/l
Alkyldimethylbenzylammoniumc hl...	Algae	NOEC		0,009 mg/l
Alkyldimethylbenzylammoniumc hl...	Fish	LC50	96 h	138 ppm
Alkyldimethylbenzylammoniumc hl...	Fish	EC50	48 h	> 100 mg/L
Alkyldimethylbenzylammoniumc hl...	Algae	EC50	72 h	> 100 mg/L
orthophosphorsyre				
orthophosphorsyre				
orthophosphorsyre				

### 12.2. Persistence and degradability

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

### 12.3. Bioaccumulative potential

**Substance**  
orthophosphorsyre

**Potential bioaccumulation**  
No

**LogPow**  
No data available

**BCF**  
No data available

#### 12.4. Mobility in soil

2-butoxyethanol: Log Koc= 0,719839, Calculated from LogPow (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

<b>14.1. UN number</b>	1760
<b>14.2. UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S.
<b>14.3. Transport hazard class(es)</b>	8
<b>14.4. Packing group</b>	III
<b>Notes</b>	-
<b>Tunnel restriction code</b>	E

##### IMDG

<b>UN-no.</b>	1760
<b>Proper Shipping Name</b>	CORROSIVE LIQUID, N.O.S. (Phosphoric Acid)
<b>Class</b>	8
<b>PG*</b>	III
<b>EmS</b>	F-A, S-B
<b>MP**</b>	-
<b>Hazardous constituent</b>	-

##### IATA/ICAO

<b>UN-no.</b>	1760
<b>Proper Shipping Name</b>	CORROSIVE LIQUID, N.O.S. (Phosphoric Acid)
<b>Class</b>	8
<b>PG*</b>	III

#### 14.5. Environmental hazards

-

#### 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.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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.
- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- 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

-

#### 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.

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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