Cleaner and deodoriser for air conditioner

Revision n. 05
Revision date: 15/09/2015

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the substance

Code:	[ACS016] 484000008642 - [ACS017] 484000008934
Denomination	**Cleaner and deodoriser for air conditioner - 500 ml**
Chemical name and synonyms	

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

Use of the substance/preparation: vitro ceram cleaner detergent.
Registration number: N.A. as mixture.

1.3. Information about manufacturer of Safety data sheet

Company name	Synt Chemical S.r.l.
Address	Via Armando Gagliani, 5
City and Country	40069 Zola Predosa (BO) - ITALY
Telephone	Tel. 051 752332 - Fax 051 754945
e-mail of the safety responsible person	laboratorio@syntchemical.it
responsible of material data sheet	Dr. Silvano Invernizzi

SDS121200810UK

1.4. Emergency telephone number

For urgent safety information call the Anti-Poison Center of your country. Check the emergency list on page 16.

2. HAZARD IDENTIFICATION.*

2.1. Classification of the preparation or mixture*

The mixture is not classified as dangerous according to Regulation 1272/2008 (CLP) (and subsequent modifications and supplements). Anyhow, the product contains dangerous substances in such concentration to be declared in Section 3, for this reason the products requires a safety data sheet conform to Regulation (EC) 1907/2006 (and subsequent modifications and supplements).

Danger Symbols
GHS05
Classification
Eye Dam. 1, H318
Skin Irrit. 2, H315
Full test of Risk phrases (H) is detailed in section 16 of this document

2.2. Data on Label*

Danger labeling according to Regulation (EC) 1272/2008 ((and subsequent modifications and supplements)

CLP pictograms:

DANGER

Hazard Statements (H-Phrases):

H315 Causes skin irritation.
H318 Causes serious eye damage

Precautionary Statements (P-Phrases):

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P280 Wear eyes/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician

Contains: 2-AMINOETHANOL. ISOTRIDECANOL, ETHOXYLATED.
AMBERONNE: May produce an allergic reaction.
ORANGE OIL TERPENES: May produce an allergic reaction.

COMPONENTS CONFORM TO REGULATION EC N.648/2004
Contains: < 5% nonionic surfactants, soaps, phosphates, parfum (LIMONENE, LINALOOL, EUGENOL, HYDROXYISOHEXYL-3-CYCLOHEXENCARBOXALDEHYDE).

2.3. Other hazards

Contains allergens: LIMONENE, LINALOOL, EUGENOL, HYDROXYISOHEXYL-3-CYCLOHEXENCARBOXALDEHYDE.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixture*

Contains

Identification	CAS	EC	INDEX	REGISTRATION	Conc. %	Classification 1272/2008 (CLP)
ETHANOL	64-17-5	200-578-6	603-002-00-5	01-2119457610-43	3,0 – 5,0	Flam. Liq. 2 H225, Eye Irrit. 2 H319
2-AMINOETHANOL	141-43-5	205-483-3	603-030-00-8	01-2119486455-28	1,5 – 2,5	Skin Corr. 1B H314, Acute Tox. 4 H302/312/332, STOT SE 3 H335, Aquatic Chronic 3 H412
ISOTRIDECANOL, ETHOXYLATED	69011-36-5	500-241-6	NA	02-2119552461-55 (polymer)	1,0 – 5,0	Acute Tox. 4 (oral) H302, Eye Irrit. 1 H318
*PROPAN-2-OL	67-63-0	200-661-7	603-117-00-0	01-2119457558-25	0,5 – 1,5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

*TETRAPOTASSIUM PYROPHOSPHATE	7320-34-5	230-785-7	NA	01-2119489369-18	0,1 – 1,0	Eye Irrit. 2 H319
* ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	203-905-0	603-014-00-0	01-2119475108-36	0,1 – 1,0	Acute tox. 4 (Inhalation - vapour) H332, Acute Tox. 4 (oral) H302, Acute Tox. 4 (skin) H312, Skin Irrit. 2 H315, Eyes Irrit. 2 H319
AMBERONNE	54464-57-2	259-174-3	NA	ND	0,1 - 0,2	Skin Sens. 1 H317; Aquatic Chronic 2 H411
ORANGE OIL TERPENES	8028-48-6	232-433-8	NA	01-2119493353-35	<0,1	Flam. Liq. 3 H226; Asp. Tox. 1 H304; Skin Irrit. 2 H315; Skin Sens. 1A H317; Aquatic Chronic 2 H411

* Component listed because have a Working exposure Limit (Section 8)
Full test of H phrase is detailed in section 16 of this document

4. FIRST AID MEASURES

No cases of damage are known to users of this product. Anyhow, if necessary, act according below measures.

4.1. First aid instructions

EYES: Wash immediately, thoroughly with plenty of water for at least 10 minutes holding the eyelids apart. If necessary consult an ophthalmologist.
SKIN: Wash the interested parts with plenty of water and neutral soap. If irritation persists, seek medical advice.
INHALATION: Take the affected person away from contaminated area to fresh air. In case of difficult respiration, seek medical advice.
INGESTION: rinse immediately the mouth. Seek immediately medical advice. Keep victim resting in a position that helps respiration. Do not induce vomiting. Do not give anything to the person if unconscious and without medical authorization

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

No incidents to health due to the products are known.

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

If incident occur, seek medical advice immediately and following instructions. If possible show Safety information.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA:
Are the traditional ones: CO_2, alcohol resistant foam, powder and water sprayed
UNSUITABLE EXTINGUISHING MEDIA:
None particular.

5.2. Special hazards arising from the substance or mixture

DANGERS DUE TO EXPOSURE IN CASE OF FIRE.
Avoid inhalation of gas spread from explosion or fires. They can contain CO_2, carbon monoxide, irritating fumes and other compounds potentially toxic to health. Refer to section 10.

5.3. Advice for fire-fighter

GENERAL INFORMATION
Delimit area and flush water from protected site. Cool other container, or product from a well-protected position to avoid heating and overheating to avoid decomposition of the product and the release of substances potentially dangerous to health. Act in security. Wear always the complete equipment of fire-fighting protection. Contain the water used to extinguish the fire and avoid they can reach the sewers. Dispose the contaminated water in accordance with local and national regulations.

PROTECTIVE EQUIPMENT
Helmet with visor, fireproof clothing (jacket and trousers with straps around the arms, legs and waist), intervention gloves (fire fighting, cut-proof and dielectric), and overpressure mask with a face shield covering the entire face of the operator or use the self-respirator (self-protector) in the case of large amounts of smoke.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Shut off and avoid any ignition source in contaminated area. Stop the leakage in case of no danger. Do not handle the damaged containers or spilled product without protective equipment. Individuals without appropriate protective equipment should be excluded from area of spill until clean-up has been completed. For further information about risk on human health, environment and protective equipment, refer to other section of this document.

6.2. Environmental precautions
Avoid release into sewerage, surface water, and groundwater. Advise immediately authorities in case of loss or spilling.

6.3. Methods and material for containment and cleaning up
Contain and collect liquid with an inert absorbent (sand, earth, Kieselguhr, etc.) and place in a container for disposal. Clean spill area thoroughly by proper equipment.
Well ventilated the area. Disposal of contaminated materials according to section 13.

6.4. Reference to other sections
Information regarding personal protective equipment and its disposal (if needed) is given in sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Keep far from food and drinks. Do not swallow the product. Handle according to a good industrial hygiene and to security measures. Wear adequate individual protective apparatus (consult section 8)

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, well-ventilated area and away from direct sunlight. Keep away from ignition source, naked flames and sparks. Keep containers well closed and labelled.
Store away from incompatible materials like strong oxidizing agents, sulphuric acid, nitric acid, alkaline and alkaline-earthly metals, alkaline oxides, acetyl chloride , peroxides, ammonia, sodium hypo chlorite , calcium hypo chlorite , perchlorates, acids, aluminium. Store at temperature between 10°C and 40 °C. If needed consult section 10.

7.3. Specific end use
Air conditioning system detergent. Consumer use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters*

Identification	Parameters	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm	Note
ETHANOL	TLV-ACGIH		1880	1000			A4
PROPAN-2-OL	TLV-ACGIH		491,53	200	983,07	400	A4
2-AMINOETHANOL	OEL	EU	2,5	1	7,6	3	Skin

ETHYLENE GLYCOL MONOBUTYL ETHER	OEL	EU	98	20	246	50	Skin
	TLV-ACGIH		96,66	20			A3
TETRAPOTASSIUM PYROPHOSPHATE	TLV-TWA	EU	4				

A3 Recognized cancerogenous on animals with importance unknown on human being
Agent resulted cancerogenous on animal from test at really high concentration, and for administration methods of histologic one, or with methods that cannot be relevant for workers. The available epidemiologic tests do not confirm the increase of cancer risk for exposed man.
The available knowledge do not let suppose that the agent may cause cancer on men.
A4 Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animals studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.

ETHANOL
DNEL ethanol (ethyl alcohol):
End-use: Workers
Exposure: Inhalation
Potential effects on health: Acute effects, local effects Value: 1900 mg/m3
End-use: Workers
Exposure: Contact with skin
Potential effects on health: Chronic effects
Value: 343 mg/kg
End-use: Workers
Exposure: Inhalation
Potential effects on health: Chronic effects
Value: 950 mg/m3
End-use: Consumer
Exposure: Inhalation
Potential effects on health: Acute effects, local effects Value: 950 mg/m3
End-use: Consumer
Exposure: Contact with skin
Potential effects on health: Chronic effects
Value: 206 mg/kg
End-use: Consumer
Exposure: Inhalation
Potential effects on health: Chronic effects
Value: 114 mg/m3
End-use: Consumer
Exposure: Ingestion
Potential effects on health: Chronic effects
Value: 87 mg/kg
PNEC ethanol (ethyl alcohol):
Fresh water
Value: 0,96 mg/l
Marine water
Value: 0,79 mg/l
Sediment of fresh water
Value: 3,6 mg/kg
Soil
Value: 0,63 mg/kg.

PROPAN-2-OL
DNEL propan-2-ol; isopropyl alcohol; isopropanol:
End-use: Workers
Exposure: Contact with skin
Potential effects on health: Chronic effects

Value: 888 mg/kg
End-use: Workers
Exposure: Inhalation
Potential effects on health: Chronic effects
Value: 500 mg/m3
End-use: Consumer
Exposure: Contact with skin
Potential effects on health: Chronic effects
Value: 319 mg/kg
End-use: Consumer
Exposure: Inhalation
Potential effects on health: Chronic effects
Value: 89 mg/m3
End-use: Consumer
Exposure: Ingestion
Potential effects on health: Chronic effects Value: 26 mg/kg
PNEC propan-2-ol; isopropyl alcohol; isopropanol: Fresh water
Value: 140,9 mg/l
Marine water
Value: 140,9 mg/l
Sediment of fresh water
Value: 552 mg/kg
Sediment marine
Value: 552 mg/kg
Soil
Value: 28 mg/kg.

2-AMINOETHANOL
DNEL(EC)
Systemic effects Long term Skin Workers 1 mg/kg
Local effects Long term Inhalation Workers 3,3 mg/m3
Systemic effects Long term Skin Population 0,24 mg/kg
Systemic effects Long term Oral Population 3,75 mg/kg
Local effects Long term Inhalation Population 2 mg/m3
PNEC(EC)
Depuration plants 100 mg/l
Sediment (fresh water) 0,425 mg/kg
Sediment (marine water) 0,0425 mg/kg
Soil 0,035 mg/kg
Fresh water 0,085 mg/l
Marine water 0,0085 mg/l
Saltuary emission 0,025 mg/l

ETHYLENE GLYCOL MONOBUTYL ETHER
Specific: TRGS 903 – Biologic limit value (D)
Parameter: butoxyacetic acid/urine/for prolonged exposure:
Value: 100 mg/L
Version date: 31/03/2004
DNEL
worker:
Long term exposure – systemic effects, skin: 75 mg/kg
Long term exposure - systemic effects, Inhalation: 20 ppm
Consumer:
Long term exposure - systemic effects, skin: 38 mg/kg
Long term exposure - systemic effects, oral: 3,2 mg/kg
Short term exposure – local effects, Inhalation: 123 mg/m3
Long term exposure - systemic effects, Inhalation: 49 mg/m3

TETRAPOTASSIUM PYROPHOSPHATE
DNEL(EC)
Local effects Long term Inhalation Workers 2,79 mg/m3
Systemic effects Long term Inhalation Population 0,68 mg/m3
PNECSTP(EC) Depuration plant 50 mg/l
PNEC(EC)
Fresh water 0,05 mg/l
Marine water 0,005 mg/l
Saltuary emission 0,5 mg/l

8.2. Exposure controls

As the use of appropriate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust ventilation or by removing stable air. If you exceed the threshold value or one or more of the substances in the preparation due to daily exposure in the work environment or a fraction determined by the corporate prevention and security service, wear an appropriate breathing mask. Refer to the product label for further details. Request further information to chemicals supplier about proper protective equipment. Protective equipment must fulfill Legislation requirement. It is recommended an emergency eyes washing system and an emergency shower

HANDS PROTECTION
Protect your hands with work gloves, category I (Directive 89/686/EEC and EN 374) such as PVC, PVA, neoprene, nitrile, PTFE Viton latex, or equivalent. For the definitive selection of the material used for the work gloves, the following factors should be considered: degradation, breakage time and permeation. In the case of preparations, glove resistance should be tested before use because it is not foreseeable. The gloves have a durability that depends on the duration of exposure

EYES PROTECTION
Goggles that adhere to the skin are suggested (see standard EN 166).

SKIN PROTECTION
Wear work clothes with long sleeves and safety footwear for professional use in category I (refer to Directive 89/686/EEC and standard EN 344). After removing protective clothing, wash affected skin with soap and water.

RESPIRATORY PROTECTION
If you exceed the threshold value of one or more of the substances in the preparation due to daily exposure in the work environment or a fraction determined by the corporate prevention and security service, wear a filter for gas/vapours of organic compounds, type EN 14387 type A. The use of respiratory protective equipment such as masks fitted with an organic vapours filter and dust/mist, is necessary in the absence of technical measures to limit worker exposure. Nonetheless, the masks provide limited protection.
In the case where the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in case of emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% in volume, where an open circuit compressed-air self-respirator (Standard EN 137) or an external air- uptake respirator to be used with full face mask, half face mask or mouthpiece (ref. Standard EN 138). It forms under-oxygenated atmosphere (O_2<18%); if necessary check the oxygen in environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties.

Appareance	Liquid
Colour	Pale yellow
Odour	Parfumed
pH as it is	10,4
Melting point/freezing point	ND (not available)
Flash point	>60°C
Evaporation rate	ND (not available)
Flammability (solid, gas);	ND (not available)
Self flammability	ND (not available)
explosive limits	Not explosive
Decomposition temperature	ND (not available)
Relative density at 20°C	1,0 g/mL
Solubility in water	Soluble
Liposolubility	ND (not available)
Partition coefficient: n-octanol/water	ND (not available)
Vapour pressure	ND (not available)
Vapours density	ND (not available)
Oxydizing property	Not oxidizing

9.2. Others information
None.

10. STABILITY AND REACTIVITY

10.1. Reactivity
No particular danger reactions with other substances in normal condition of use.

10.2. Chemical stability
Product is stable in normal condition and storage.

10.3. Possibility of hazardous reactions
No hazardous reactions for normal storage and use. Avoid contact with incompatible materials.

ETHANOL: explosive risk in contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulfur monofluoride, acetic anhydride (with acids), hydrogen peroxide concentrate, perchlorates, per-chlorite acid, perchloro-nitrile, quicksilver nitrate, nitric acid, silver and nitric acid, silver nitrate, silver nitrate and ammonia, silver oxide and ammonia, strong oxidizing agents, nitrogen dioxide. May react dangerously with: bromine acetylene, chloride acetylene, trifluorobromide, chrome trioxide, chromyl chloride, oxyranes, fluorine, potassium tert-butoxyde, lithium hydride, phosphor tri-oxide, black platinum , zirconium chloride (IV), zirconium iodide (IV), Forms explosive mixture with air.

10.4. Conditions to avoid
Use normal actions for chemical products. Avoid overheating, electric discharges and any source of ignition.

10.5. Incompatible materials
Strong oxidizer agents, acids, aluminum, sulfuric acid, nitric acid, alkaline metals and earthy-alkaline, alkaline oxides, acetyl chloride, peroxides, ammonia, sodium hypochlorite, calcium hypochlorite, perchlorates.

10.6. Hazardous decomposition products
In case of fire or decomposition may spread gas and vapors potentially harmful for health as CO_2, carbon monoxide, irritating fumes

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
No problems of damage due to exposure are known. In any case it is recommended to act according to a good industrial hygiene. The product may cause soft effects on sensible people if swallowed, skin absorption, contact with eyes, swallowing.

ETHANOL
Eyes: irritant. Lightly irritant on rabbit, OECD TG 405 (Literature value).
Skin: irritant. Not irritant on rabbit, OECD TG 404 (Literature value).
Inhalation: acute toxicity on man for concentrations >5000 ppm; the value may cause narcotic effects, nose and eyes irritation, heat sensation, headache, vision disturbs, vomit, dizziness
LC50: 39 mg/L/4 h, rat (Literature value). LC50: 2000 ppm/10 h, rat (Literature value).
Swallowing: acute toxicity on man for high quantity swallowing. may cause narcotic effects, nose and eyes irritation, heat sensation, headache, vision disturbs, vomiting , dizziness, cardiac-breathing arrest.
LD50: 7060 mg/kg (rat); LD50: 3450 mg/kg (rat); LD50: 6300 mg/kg (rabbit); OECD TG 401 (Literature value).
Contact: light irritation.
Short term toxicity: acute toxicity for man for concentrations >5000 ppm.
LD50 skin rabbit: >2000 mg/kg; OECD TG 402 (Literature value).
Long term toxicity: prolonged exposure to vapors: nervousness, tiredness, effects on concentration and vigilance capability. Mutability of optic nerve
Genotoxicity in vitro*: Ames Method:* not mugatenetic OECD TG 471 (Literature value).
Sensitization**:** Maximization Test Guinea pig: not sensitizing: OECD TG 406 (Literature value).
Carcinogenicity**:** ACGIH: A3.
Epidemiology**:** fetus toxic for embryonic or fetus of laboratory animal. Prenatal exposure of Ethanol is linked to the presence of congenital malformation (fetal alcohol syndrome).
Teratogenity**:** TDL° = 41 mg/kg (oral, woman)
Effects on reproductive system: TDL° = 200 mg/kg (woman)

2-AMINOETHANOL
LD50 oral: 2.100 mg/kg (rat)
LD50 (skin): 1.000 mg/kg (rabbit)
Specific : LC50
Exposure : Inhalation
Specie for the test : Rat
Value : = 1,48 mg/l
Duration of the test : 4h
Specific : LD50
Exposure : oral
Specie for the test : Rat
Value : = 1515 mg/kg
Specific : LD50
Exposure : skin
Specie for the test: Rat
Value : = 2504 mg/kg
Primary irritability
Causes burns.
Sensitization
Not skin sensitizer (Guinea Pig)

ETHYLENE GLYCOL MONOBUTYL ETHER
LD50 (Oral): 200 – 2000 mg/kg (rat)
LD50 (skin): 400 – 2000 mg/kg (rat)
LC50 (Inhalation): 2 – 20 mg/L/4 h (rat)
More information: irritation appeared on animal test.

PROPAN-2-OL
LD50 (Oral): 3570 mg/kg (rat)
LD50 (skin): 12800 mg/kg (rat)
LC50 (Inhalation): 72,6 mg/L/4 h (rat)
LC50 (Inhalation): 27,2 mg/L/4 h (mouse)
Irritation to eyes: irritant to eyes.
Sensitization: not sensitizer.
Toxic to evolved systemic organ – single exposition: may cause dizziness.
CMR effects, mutagenicity: not mutagenic to Ames test.

ISOTRIDECANOL, ETHOXYLATED
Acute toxicity
Experimental data/calculated:
DL50 rat (oral): > 200 - < 2.000 mg/kg
Irritation
Experimental data/calculated:
Corrosion/irritation rabbit skin: not irritating (Guideline OECD 404)
Severe damage to eyes/irritation to eyes rabbit: irreversible damages (Guideline OECD 405) More information about toxicity
The product has not been tested. The information is deducted from the properties of the singles components.

TETRAPOTASSIUM PYROPHOSPHATE
Primary irritability
LC50 Inhalation Rat > 1,1 mg/l 4 hours
LD50 Oral Rat (male) > 1000 mg/kg
LD50 Skin Rabbit > 2000 mg/kg
Primary irritability
Inhalation:
Avoid to inhale the dust. Dust may be irritating to respiratory system, effect couching, chest pain and breathing difficulty.
Ingestion:
If swallowed in big quantities may cause irritation to mouth and gorge, sickness and vomit.
In contact with skin:
For prolonged contact may cause irritation and dermatitis.
Contact with eyes:
Causes irritation.
Sensitization
It does not cause sensitization.

12. ECOLOGICAL INFORMATION
Use according good working practice; avoid spreading the product into environment
Advise immediately authorities in case of lose or spilling.

12.1. Toxicity

ETHANOL
LC50 (48 h): >100 mg/L *Leucuscus idus*, OECD TG 203 (Literature value)
LC50 (24 h): 11200 mg/L trout, Literature value
EC50 (24 h): > 100 mg/L *Daphnia magna* (according to OECD TG 202)
EC50 (24 h): >100 mg/L *Chlorella pyrenoidosa*, OECD TG 201 (Literature value)

2-AMINOETHANOL
Specific EC50
Parameter Daphnia
Daphnia magna
Value = 65 mg/l
Duration of the test : 48h
Specific EC50

Parameter Algae Pseudokirchneriella subcapitata
Value = 2,5 mg/l
Duration of the test : 72h
Specific EC50
Parameter Fish
Value = 349 mg/l
Duration of the test : 96 hours

ETHYLENE GLYCOL MONOBUTYL ETHER
EC50 (24 h): > 100 mg/L (*Daphnia magna*)
EC50 (7 d): > 100 mg/L (algae)
LC50 (96 h): > 100 mg/L (Fish)

PROPAN-2-OL
LC50 (96 h): 1400 mg/L (*Lepomis macrochirus*)
EC50 (48 h): 2285 mg/L (*Daphnia magna*)

ISOTRIDECANOL, ETHOXYLATED
Fish toxicity:
CL50 (96 h) 10 - 100 mg/l, Leuciscus idus
Aquatic invertebrates:
CE50 (48 h) 10 - 100 mg/l
Aquatic plants:
CE50 (72 h) 10 - 100 mg/l
Microorganisms/Effects on active muds:
CE10 (17 h) > 10.000 mg/l (DIN 38412 part 8)

TETRAPOTASSIUM PYROPHOSPHATE
LC50 (TETRAPOTASSIUM PYROPHOSPHATE; NR. CAS : 7320-34-5) Fish Oncorhynchus mykiss
> 100 mg/l 96h
EC50 (TETRAPOTASSIUM PYROPHOSPHATE; NR. CAS : 7320-34-5)
Algae Desmodesmus subspicatus
> 100 mg/l 72h
EC50 (TETRAPOTASSIUM PYROPHOSPHATE; NR. CAS : 7320-34-5) Daphnia Daphnia magna
> 100 mg/l 48h

12.2 Persistence and degradability
No data available for mixture.
ETHANOL: readily biodegradable >70 % (5 d); OECD TG 301 D (Literature value). C.O.D.: 1640000 mg O2 spent for Ethanol. Theoretic request 1586000 mg/L.
2-AMINOETHANOL: Easily biodegradable
ETHYLENE GLYCOL MONOBUTYL ETHER: Easily biodegradable.
ISOTRIDECANOL, ETHOXYLATED: evaluation of elimination, >=90% active substance at bismuth (mod. OECD 301E). >60% CO_2 formation of theoretic value (28 days) (OECD 301B; ISO 9439; 92/69/ECC, C.4-C). Easily biodegradable.
Analogism: The statement has been derived from products chemically similar.

12.3. Bio accumulative potential
No data available for mixture.
ETHANOL: does not significantly accumulate in organisms.
2-AMINOETHANOL: The product has low potential for bioaccumulation.
ETHYLENE GLYCOL MONOBUTYL ETHER: The product has low potential for bioaccumulation.
ISOTRIDECANOL, ETHOXYLATED: evaluation of the bio accumulative potential: accumulation in organism is not expected.

12.4. Mobility in soil
No data available for mixture.
ETHANOL: complete solubility in water, vaporizable into the atmosphere.
2-AMINOETHANOL: the product has a high mobility.
ETHYLENE GLYCOL MONOBUTYL ETHER: the product has a high mobility.

ISOTRIDECANOL, ETHOXYLATED: Evaluation of the transfer rates between environmental compartments: the substance does no evaporate in the air from water surface. Soil absorption is possible from solid phase

12.5. Results of PBT and vPvB assessment

No data available for mixture.
2-AMINOETHANOL: this product is not, and does not contain, substance classified PBT or vPvB.
ETHYLENE GLYCOL MONOBUTYL ETHER: this product is not, and does not contain, substance classified PBT or vPvB.
ISOTRIDECANOL, ETHOXYLATED: In conformity to Annex XIV of Regulation 1907/2006/CE about Registration Evaluation Authorization and Restriction of chemical substances (REACh): the products does not contain substances PBT (Persistent, bioaccumulative and toxic) or vPvB (Very Persistent and very Bioaccumulative) Auto classification.

12.6. Other adverse effects

ISOTRIDECANOL, ETHOXYLATED
More information for Fish Toxicology:
A correct emission of small concentrations in adapted biologic depuration plants should not cause inconvenient to degradation for active muds. Do not enter in waters without a preventive treatment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment method

Recycle, if possible. Act in accordance with local and national regulations. Refer to current national legislation. Do not release into sewerage. Do not pollute watercourses. Residues have to be considered as dangerous waste
CONTAMINATED PACKAGING
Indications: empty containers shall not be released to the environment.
Remarks: user has to ensure that no other regional or national rules are in force

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations (A.D.R., RID, IMDG, IATA).

15. REGULATORY INFORMATION

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)

Where applicable, refer to the following regulatory provisions :
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

Seveso class. None

Restriction related to the mixture or contained substance, according to Annex XVII, Regulation EC 1907/2006. None

Substance in Candidate List (Art. 59 REACh). None

Substance edified for Authorization (Annex XIV REACh) None

Sanitary controls.
Workers exposed to this chemical agent must be monitored far health issues according to Legislation.

15.2. Chemical safety assessment

Not elaborated for the mixture.

16. OTHER INFORMATION*

Full Danger and H-phrase indicated in section 2-3 of this document

H225 Highly flammable liquid and vapor
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation.
H318 Causes severe damage to eyes.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation
H332 Harmful if inhaled
H336 May cause drowsiness or dizziness
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

LITERATURE:

1. The Merck Index. Ed. 10
2. Handling Chemical Safety
3. Niosh - Registry of Toxic Effects of Chemical Substances
4. INRS - Fiche Toxicologique
5. Patty - Industrial Hygiene and Toxicology
6. N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 1989

List of abbreviations:
ACGIH: American Conference of Governmental Industrial Hygienists
CSR: Report of Chemical Security.
DNEL: Derived No-Effect Level.
DMEL: Derived Minimal Effect Levels.
EC50: Effective concentration, 50%.
EL50 : Effective Loading, 50%.
EPA: Environmental Protection Agency.
IC50: Inhibitory Concentration, 50%.
LC50: Lethal Concentration, 50%.
LD50: Lethal Dose, 50%.
LL50: Lethal Loading, 50%.
LL0: Lethal Loading, 0%.

LOAEL: Low Observed Adverse Effects Level.
LOAEC: Low Observed Adverse Effects Concentration.
NOEC: No Observed Effects Concentration.
NOEL: No Observed Effects Level. .
NOAEL: No Observed Adverse Effects Level. .
NOELR: No Observed Effect Loading Rate.
OECD: The Organization for Economic Co-operation and Development.
TLV-TWA : Threshold Limit Value - Time Weight Average.
N/A: Not applicable.
PBT: Persistent, bio accumulative and toxic.
SNC: Central Nervous System.
STOT: Specific Target Organ Toxicity.
(STOT) RE: Specific target organ toxicity – repeated exposure.
(STOT) SE: Specific target organ toxicity – single exposure.
PNEC: Predicted No-Effect Concentration.
TLV-STEL: threshold limit value - Short-term exposure limit.
UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials.
vPvB: Very Persistent and very Bio accumulative.
WAF = Water Accommodated Fraction

Note for the user:
The information on this sheet is based on information that was available at our premises as of the date of the last version.
The user must make sure such information is complete in relation to the specific use being made of the product.
Said document must not be interpreted as a guarantee of any specific property of the product. Since the use of the product is not under our direct control, it is the responsibility of the user to observe the law and other provisions in force on matters of health and safety. We shall not be held liable for any improper uses.

Cleaner and deodoriser for air conditioner

INGREDIENTS SHEET

COMPONENT IUPAC	INCI NAME	CAS	Pharmacopea name	EINECS	%
ETHANOL	ALCOHOL	64-17-5	ALCOHOLUM / ETHANOLUM	200-578-6	1 -10
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-TRIDECYL-.OMEGA.-HYDOXY-, BRANCHED /	TRIDECETH-12	69011-36-5		500-241-6	1 -10
2-AMINOETHANOL	ETHANOLAMINE	141-43-5		205-483-3	1 -10
PERFUME AND AROMATIC COMPOSITIONS AND THEIR RAW MATERIALS	PARFUMS	-		-	1 -10
PROPAN-2-OL, ISOPROPANOL	ISOPROPYL ALCOHOL	67-63-0		200-661-7	0,1-1
TETRAPOTASSIUM PYROPHOSPHATE	TETRAPOTASSIUM PYRO- PHOSPHATE	7320-34-5		230-785-7	0,1-1
ETHYLENE GLYCOL MONOBUTYL ETHER	BUTOXYETHANOL	111-76-2		203-905-0	0,1-1
FATTY ACIDS, C16-C18 AND C18-UNSATURATED	-	67701-08-0		266-932-7	0,1-1

Emergency telephone numbers

For urgent safety information call the Anti-Poison Center of your country:

COUNTRY	CUSTOMER SERVICE NR.	ANTI-POISON CENTER NR.
AUSTRIA	(0043) 050 6700 200	(0043) 01 406 43 43
BELGIUM	0032 (0)2 263 33 33	(0032) 070 245 245
CZECK REP.	(00420) 840 111 313	(00420) 224 91 54 02
DENEMARK	(0045) 44880280	(0045) 82121212
FINLAND	(09) 61336 235	(09) 471977
FRANCE	(0033) 0892 700 150	(0033) 01 40 05 48 48
GERMAN	(0049) 0711 93533655	(0049) 0761 19240
GREECE	(0030) 2109946400	(0030) 2107793777
HOLLAND	0031 (0)76 530 6400	(0031) 030 274 8888
HUNGARY	(0036) 06 40 109 109	(0036) 80 20 11 99
IRELAND	(00353) 0844 815 8989	(00353) 1 8092566
ITALY	(0039) 199 580 480	(0039) 02 66101029
NORWAY	(0047) 22782500	(0047) 22 59 13 00
POLAND	(0048) 801 900 666	*Warszawa:* (0048) 22 619 66 54 *Gdańsk:* (0048) 58 682 04 04 *Poznań:* (0048) 61 847 69 46 *Kraków:* (0048) 12 411 99 99
PORTUGAL	(00351) 707 203 204	(00351) 808 250143
ROMANIAN	(0040) 0372 117 745	
RUSSIA	007 (495)745 57 31	
SLOVAKIA	(00421) 0850 003 007	(00421) 2 54774166
SPAIN	(0034) 902 203 204	(0034) 915 620 420
SWEDEN	(0046) 0771 751570	(0046) 08 331231
SWISS	(0041) 0848 801 005	(0041) 145
UK	(0044) 0844 815 8989	(0044) 0845 46 47 (0044) 020 7188 0600
UCRAIN	(00380) 0 800 501 150	