TANEX VIVACERAM

WM 0713855 **Order number: 0713855**

Version 8.1 Revision Date 22.01.2026 Print Date 11.03.2026

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

1.1 Product identifier

Trade name	:	TANEX VIVACERAM
UFI	:	G861-007S-S00Q-5J9T

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

Use of the Substance/Mixture	:	Cleaning agent Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company	:	Tana Chemie GmbH Rheinallee 96 55120 Mainz
Telephone	:	+49613196403
Telefax	:	+4961319642526
E-mail address	:	Produktsicherheit@werner-mertz.com
Responsible/issuing person Contact person	:	Product development / product safety

1.4 Emergency telephone

EU: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to Metals, Category 1	H290: May be corrosive to metals.
Skin corrosion, Sub-category 1B	H314: Causes severe skin burns and eye damage.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal Word	:	Danger	
Hazard Statements	:	H290 H314	May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary Statements	:	P102 **Prevention:** P264 P280	Keep out of reach of children. Wash hands thoroughly after handling. Wear protective gloves/ eye protection/ face protection.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P310	Immediately call a POISON CENTER or doctor/ physician.

Disposal:

P501	Dispose of container into the collection of recyclables only when it is completely empty.

Hazardous ingredients which must be listed on the label:

Alcohols, C6-12, ethoxylated
Sodium metasilicate, pentahydrate

Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous surfactant solution.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
tetrapotassium pyrophosphate	7320-34-5 230-785-7 01-2119489369-18	Eye Irrit. 2; H319	>= 3 - < 5
Alcohols, C6-12, ethoxylated	68439-45-2	Eye Dam. 1; H318 Acute Tox. 4; H302	>= 1 - < 3
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	1554325-20-0	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 3
Sodium metasilicate, pentahydrate	10213-79-3 01-2119449811-37	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 1 - < 3

		STOT SE 3; H335	
sodium hydroxide	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 --- specific concentration limit Skin Corr. 1A; H314 >= 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0,5 - < 2 % Eye Irrit. 2; H319 0,5 - < 2 %	>= 0,5 - < 1
Fatty alcohol alkoxylate	113089-47-7	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	>= 0,25 - < 1
Substances with a workplace exposure limit :			
(2-methoxymethylethoxy)propanol	34590-94-8 252-104-2 01-2119450011-60		>= 3 - < 5

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Protect unharmed eye.
Continue rinsing eyes during transport to hospital.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : corrosive effects

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Neutralize with acid. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store at room temperature in the original container.
Further information on storage stability	:	No decomposition if stored and applied as directed. Protect from frost.

7.3 Specific end use(s)

Specific use(s)	:	Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
(2-methoxymethylethoxy)propanol	Not Assigned	TWA	50 ppm 308 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 308 mg/m3	
	Further information: Dermal absorption possible			
			100 ppm	
	Further information: Dermal absorption possible			
		STEL	150 ppm	
	Further information: Dermal absorption possible			

			100 ppm	
	Further information: Recommended exposure limit			
		STEL	150 ppm 900 mg/m3	
		STEL	50 ppm 310 mg/m3	

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
tetrapotassium pyrophosphate	Workers	Inhalation	Long-term systemic effects	2,79 mg/m3
	Consumers	Inhalation	Long-term systemic effects	0,68 mg/m3
	Consumers	Ingestion	Long-term systemic effects	> 70 mg/kg
(2-methoxymethylethoxy)propanol	Workers	Skin contact	Long-term systemic effects	65 mg/kg
	Workers	Inhalation	Long-term systemic effects	310 mg/m3
	Consumers	Skin contact	Long-term systemic effects	15 mg/kg
	Consumers	Ingestion	Long-term systemic effects	1,67 mg/kg
	Consumers	Inhalation	Long-term systemic effects	37,2 mg/m3
	Workers	Inhalation	Long-term systemic effects	308 mg/m3
	Workers	Skin contact	Long-term systemic effects	283 mg/kg
	Consumers	Skin contact	Long-term systemic effects	121 mg/kg
	Consumers	Ingestion	Long-term systemic effects	36 mg/kg

Sodiumsilicate, pentahydrate, Silicic acid (H2SiO3), disodium salt, pentahydrate, Sodium silicate pentahydrate	Consumers	Oral	Long-term systemic effects	0,74 mg/kg
	Workers	Inhalation	Long-term systemic effects	6,22 mg/m3
	Consumers	Inhalation	Long-term systemic effects	1,55 mg/m3
	Workers	Skin contact	Long-term systemic effects	1,49 mg/kg
	Consumers	Skin contact	Long-term systemic effects	0,74 mg/kg
sodium hydroxide	Workers	Inhalation	Long-term local effects	1,0 mg/m3
	Workers	Inhalation	Long-term systemic effects, Long-term local effects	1,5 mg/m3
	Workers	Inhalation	Short-term exposure, Local effects, Systemic effects	3 mg/m3
	Consumers	Inhalation	Long-term local effects, Long-term systemic effects	0,6 mg/m3
	Consumers	Inhalation	Short-term exposure, Local effects, Systemic effects	1,2 mg/m3
	Consumers	Ingestion	Long-term local effects, Long-term systemic effects	25 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
tetrapotassium pyrophosphate	Fresh water	0,05 mg/l
	Sea water	0,005 mg/l
	STP	50 mg/l
	intermittent release	0,5 mg/l
(2-methoxymethylethoxy)propanol	Fresh water	19 mg/l

	Sea water	1,9 mg/l
	Fresh water sediment	70,2 mg/kg
	Sea sediment	7,02 mg/kg
	Soil	2,74 mg/kg
	Water	190 mg/l
	STP	4168 mg/l
Sodiumsilicate, pentahydrate, Silicic acid (H2SiO3), disodium salt, pentahydrate, Sodium silicate pentahydrate	Fresh water	7,5 mg/l
	Sea water	1 mg/l
	intermittent release	7,5 mg/l
	STP	1000 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection

Material : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Remove and wash contaminated clothing before re-use.

Respiratory protection : Not required; except in case of aerosol formation.

Recommended Filter type:

ABEK-P3-filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Color	:	yellow-orange
Odor	:	characteristic
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No information available.
Flammability (solid, gas)	:	No data available
Flammability (liquids)	:	No data available
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Flash point	:	does not flash
Ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	ca. 11,2, 1 % at 20 °C
Viscosity, dynamic	:	186 mPa.s at 20 °C
Viscosity, kinematic	:	No data available
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Vapor pressure	:	No data available
Density	:	ca. 1,045 g/cm3 at 20 °C
Relative density	:	No data available
Relative vapor density	:	No data available
Particle characteristics	:	No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.
No decomposition if used as directed.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost.

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Our company is strongly against animal testing.
Our company does not place any orders for animal testing for the finished product or the ingredients.
However, as a result of EU legislation (REACH Regulation), the manufacturers of ingredients or EU importers are obliged to test ingredients with regard to their effects on human health and the environment before they are brought onto the market. Some of the tests made necessary by this took place decades ago.

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

Components:

tetrapotassium pyrophosphate

7320-34-5:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg

LD50 (Mouse): > 2.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1,1 mg/l
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rabbit): > 7.940 mg/kg

LD50 Dermal (Rabbit): > 2.000 mg/kg
Method: OECD Test Guideline 402

Alcohols, C6-12, ethoxylated

68439-45-2:

Acute oral toxicity	:	LD50 Oral (Rat): > 300 - 2.000 mg/kg
Acute dermal toxicity	:	LD50 Dermal (Rat): > 2.000 mg/kg

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Acute oral toxicity	:	LD50 (Rat): > 300 - 2.000 mg/kg

Sodium metasilicate, pentahydrate

10213-79-3:

Acute oral toxicity	:	LD50 (Rat): 1.152 - 1.349 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 2,06 mg/l
Acute dermal toxicity	:	LD50 (Rat): > 5.000 mg/kg

sodium hydroxide

1310-73-2:

Acute oral toxicity	:	LD50 Oral (Rat): 2.000 mg/kg

Fatty alcohol alkoxylate

113089-47-7:

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: Calculation method
		LD50 (Rat): > 2.000 - 5.000 mg/kg

(2-methoxymethylethoxy)propanol

34590-94-8:

Acute oral toxicity	:	LD50 (Dog): 7.500 mg/kg
		LD50 (Rat): 5.130 mg/kg
		LD50 (Rat): 5.135 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 55 - 60 mg/l Exposure time: 4 h
		LC50 (Rat): 3,35 mg/l Exposure time: 7 h
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 19.000 mg/kg
		LD50 Dermal (Rat): 9.500 mg/kg
		LD50 (Rabbit): 9.510 mg/kg
		LD50 (Rabbit): 14.000 mg/kg

Skin corrosion/irritation

Product:

Remarks : Extremely corrosive and destructive to tissue.

Components:

tetrapotassium pyrophosphate

7320-34-5:

Result : Mild skin irritation

Result : No skin irritation

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Result : Skin irritation

sodium hydroxide

1310-73-2:

Result : Corrosive

Fatty alcohol alkoxylate

113089-47-7:

Species : Rabbit
Method : OECD Test Guideline 404
Result : irritating

(2-methoxymethylethoxy)propanol

34590-94-8:

Remarks : No skin irritation

Serious eye damage/eye irritation

Product:

Remarks : May cause irreversible eye damage.

Components:

tetrapotassium pyrophosphate

7320-34-5:

Result : Eye irritation

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Result : Risk of serious damage to eyes.

sodium hydroxide

1310-73-2:

Result : Corrosive

Fatty alcohol alkoxylate

113089-47-7:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

(2-methoxymethylethoxy)propanol

34590-94-8:

Result	:	No eye irritation

Respiratory or skin sensitization

Product:

Remarks	:	No data available

Components:

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Result	:	Does not cause skin sensitization.

(2-methoxymethylethoxy)propanol

34590-94-8:

Result	:	Does not cause skin sensitization.

Germ cell mutagenicity

Germ cell mutagenicity	:	Not Rated

Components:

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Genotoxicity in vitro	:	Test Type: Ames test Result: negative
Carcinogenicity	:	Not Rated
Reproductive toxicity	:	Not Rated
STOT-single exposure	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT-repeated exposure	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

(2-methoxymethylethoxy)propanol

34590-94-8:

Species	:	Rat
NOAEL	:	1.000 mg/kg
Application Route	:	Oral
Exposure time	:	28 d

Aspiration toxicity : Not Rated

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

tetrapotassium pyrophosphate

7320-34-5:

Toxicity to fish : LC0 (Leuciscus idus (Golden orfe)): > 750 mg/l
Exposure time: 48 h

LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 : > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

NOEC : > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : (activated sludge): > 1.000 mg/l
Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity) : 100 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD Test Guideline 203

Alcohols, C6-12, ethoxylated, Alcohols, C6-12, ethoxylated (5 EO)

68439-45-2:

Toxicity to fish : LC50 (Fish): > 10 - 100 mg/l

Toxicity to algae/aquatic plants : EC50 : > 10 - 100 mg/l

Toxicity to microorganisms : EC50 : 10 - 100 mg/l

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Toxicity to fish : LC50 (Fish): > 10 - 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): > 1 - 10 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 : > 1 - 10 mg/l
Exposure time: 72 h

Sodiumsilicate, pentahydrate, Silicic acid (H2SiO3), disodium salt, pentahydrate, Sodium silicate pentahydrate

10213-79-3:

Toxicity to fish : LC50 (Brachydanio rerio): 210 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.700 mg/l
Exposure time: 48 h

sodium hydroxide

1310-73-2:

Toxicity to fish : LC50 (Fish): 33 - 189 mg/l
Exposure time: 96 h

LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l
Exposure time: 96 h

LC50 (Poecilia reticulata (guppy)): 76 mg/l
Exposure time: 24 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): 40,4 mg/l

EC50 (Daphnia magna (Water flea)): 76 mg/l
Exposure time: 24 h

EC50 (Ceriodaphnia (water flea)): 40,4 mg/l
Exposure time: 48 h
Test Type: Immobilization

Toxicity to microorganisms : EC50 (Photobacterium phosphoreum): 22 mg/l

Exposure time: 15 min

Fatty alcohol alkoxylate

113089-47-7:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 1 - 10 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,1 - 1 mg/l
Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum): 0,1 - 1 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

NOEC (Selenastrum capricornutum): 0,101 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to microorganisms : EC10 (Pseudomonas putida): > 10.000 mg/l
Method: DIN 38412

(2-methoxymethylethoxy)propanol

34590-94-8:

Toxicity to fish : (Pimephales promelas (fathead minnow)): > 10.000 mg/l
Exposure time: 96 h
Test Type: static test

(Poecilia reticulata (guppy)): > 1.000 mg/l
Exposure time: 96 h
Test Type: static test

(Fish): > 1.000 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.919 mg/l
Exposure time: 48 h
Test Type: static test

EC50 (Crangon crangon (shrimp)): > 1.000 mg/l
Exposure time: 96 h
Test Type: semi-static test

NOEC (Daphnia magna (Water flea)): > 0,5 mg/l
Exposure time: 22 d

Toxicity to algae/aquatic plants : (Pseudokirchneriella subcapitata (microalgae)): > 969 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 201

(Selenastrum capricornutum): 1.000 mg/l
Exposure time: 72 h

EC50 (Skeletonema costatum (marine diatom)): 6.999 mg/l
Exposure time: 72 h

EC50 (Selenastrum capricornutum (green algae)): 969 mg/l
Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 969 mg/l
Exposure time: 72 h

Toxicity to microorganisms : EC10 (Pseudomonas putida): 4.168 mg/l
Exposure time: 18 h
Test Type: Growth inhibition

EC50 (No data available): > 100 mg/l

EC20 (activated sludge): > 1.000 mg/l
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 12 mg/l
Species: Daphnia magna (Water flea)

NOEC: > 0,5 mg/l
Exposure time: 22 d
Species: Daphnia magna (Water flea)

Lowest Observed Effect Concentration: > 0,5 mg/l
Exposure time: 22 d
Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Components:

tetrapotassium pyrophosphate

7320-34-5:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Alcohols, C6-12, ethoxylated, Alcohols, C6-12, ethoxylated (5 EO)

68439-45-2:

Biodegradability : Remarks: The surfactant(s) contained in this mixture 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.

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Biodegradability : Result: rapidly biodegradable
Method: OECD 301 D

sodium hydroxide

1310-73-2:

Biodegradability : Result: Biodegradable
Remarks: The methods for determining the biological degradability

are not applicable to inorganic substances.

Fatty alcohol alkoxylate

113089-47-7:

Biodegradability : Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD 301 B

(2-methoxymethylethoxy)propanol

34590-94-8:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 70 %
Exposure time: 28 d
Method: OECD 301 E

Biodegradation: 75 %
Exposure time: 28 d
Method: OECD 301 F

Biodegradation: 93 %
Exposure time: 13 d
Method: OECD 302 B

Biodegradation: 91 %
Exposure time: 28 d
Method: EN ISO 14593: CO2-Headspace-Test

Biodegradation: 75 %
Exposure time: 10 d
Method: OECD 301 F

12.3 Bioaccumulative potential

Components:

tetrapotassium pyrophosphate

7320-34-5:

Bioaccumulation : Remarks: Does not bioaccumulate.

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

sodium hydroxide

1310-73-2:

Bioaccumulation : Species: Fish
Remarks: No bioaccumulation is to be expected (log Pow <= 4).

(2-methoxymethylethoxy)propanol

34590-94-8:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water : log Pow: 1,01

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride

1554325-20-0:

Assessment : Not persistent, bioaccumulative, and toxic (PBT).. Not very persistent and very bioaccumulative (vPvB).

(2-methoxymethylethoxy)propanol

34590-94-8:

Assessment : Not very persistent and very bioaccumulative (vPvB).. Not persistent, bioaccumulative, and toxic (PBT).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
In accordance with local and national regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

Waste Code European Waste Catalog
20 01 29*
According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	3266
IMDG	:	3266
IATA	:	3266

14.2 UN proper shipping name

ADR	:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate, pentahydrate)
IMDG	:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium metasilicate, pentahydrate)
IATA	:	Corrosive liquid, basic, inorganic, n.o.s. (Sodium metasilicate, pentahydrate)

14.3 Transport hazard class(es)

ADR	:	8
IMDG	:	8
IATA	:	8

14.4 Packing group

ADR		
Classification Code	:	C5
Packaging group	:	II
Hazard Identification Number	:	80
Labels	:	8
Tunnel restriction code	:	(E)
IMDG		
Packaging group	:	II
Labels	:	8
EmS Number	:	F-A, S-B
IATA		
Packing instruction (cargo aircraft)	:	855
Packing instruction (LQ)	:	Y840
Packaging group	:	II
Labels	:	8

14.5 Environmental hazards

ADR		
Environmentally hazardous	:	no
IMDG		
Marine pollutant	:	no
IATA		
Environmentally hazardous	:	no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

For personal protection see section 8.

14.7 Maritime transport in bulk according to IMO instruments
Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	See Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	:	Not applicable
TA Luft List (Germany)	:	Total dust: Not applicable
	:	Inorganic substances in powdered form: Not applicable
	:	Inorganic substances in vapor or gaseous form: Not applicable
	:	Organic Substances: : portionClass 1: < 0,01 %
	:	Carcinogenic substances: Not applicable
	:	mutagenic: Not applicable
	:	Toxic to reproduction: Not applicable
Volatile organic compounds (VOC) content	:	Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Update: Percent volatile: 3,05 % 303,17 g/l VOC content excluding water
Volatile organic compounds (VOC) content	:	Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Update: Percent volatile: 3,05 % 31,88 g/l VOC content valid only for coating materials used on wood surfaces
according to Detergents Regulation EC 648/2004	:	<5% phosphates, cationic surfactants, non-ionic surfactants, perfumes, AMYL CINNAMAL, LIMONENE

15.2 Chemical Safety Assessment
There is no data available for this product.

SECTION 16: Other information

Full text of H-Statements

H290	:	May be corrosive to metals.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.

H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H335	:	May cause respiratory irritation.
H400	:	Very toxic to aquatic life.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Met. Corr.	:	Corrosive to Metals
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2000/39/EC / TWA	:	Limit Value - eight hours

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Met. Corr. 1	H290	On basis of test data.
Skin Corr. 1B	H314	On basis of test data.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality

specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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