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

1.1. Product identifier

TICKOPUR TR 2

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

Use of the substance/mixture

Cleaning agent. Special acid cleaner for the ultrasonic bath, demulsifying, concentrate.
Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Company name:	DR.H.STAMM GmbH Chemische Fabrik
Street:	Heinrichstr. 3 – 4
Place:	12207 Berlin, GERMANY
Telephone:	+49 30 76880-280
e-mail:	info@dr-stamm.de
Internet:	www.dr-stamm.de
Responsible Department:	sdb@dr-stamm.de, Tel.: +49 30 76880-258

1.4. Emergency telephone number:

24-hours-emergency: Giftnotruf Berlin: +49 30 30686700 (german, english)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

C12-C14 Fatty alcohol ethoxylate
Phosphoric acid ... %; orthophosphoric acid
Phosphoric acid ester, sodium-salt

Signal word: Danger

Pictograms:

Hazard statements

H318	Causes serious eye damage.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			70-80 %
	213-791-2			
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether			<10,0 %
	203-961-6		01-2119475104-4	
	Eye Irrit. 2; H319			
68439-50-9	C12-C14 Fatty alcohol ethoxylate			<10,0 %
	-		*	
	Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 3; H302 H318 H412			
7664-38-2	Phosphoric acid ... %; orthophosphoric acid			<5,0 %
	231-633-2	015-011-00-6	01-2119485924-24	
	Skin Corr. 1B; H314			
111798-26-6	Phosphoric acid ester, sodium-salt			<2,0 %
	-		*	
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
12645-31-7	Phosphoric acid-2 ethylhexylester			<1,0 %
	235-741-0		01-2119896587-13	
	Skin Corr. 1B; H314			

Full text of H and EUH statements: see section 16.

Further Information

*Polymer

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated clothing.

After inhalation

In case of inhalation of aerosols/spray mist/splash spots: Consult physician. Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water and soap.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an opthalmologist.

After ingestion

Rinse mouth immediately and drink large quantities of water. Do not induce vomiting. Consult physician.

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

No symptoms known up to now.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water. Foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Nitrogen oxides (NOx). Carbon dioxide (CO_2). Phosphorus oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters: Use appropriate respiratory protection. In case of fire and/or explosion do not breathe fumes.

Additional information

Material is not combustible. Extinguishing materials should be selected according to the surrounding area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Treat the assimilated material according to the section on waste disposal. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special technical protective measures are necessary.

Advice on protection against fire and explosion

Product is not: Oxidizing. Flammable. Explosive.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store only in original container.
Keep away from food, drink and animal feedingstuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether			
Consumer DNEL, long-term		oral	systemic	1,25 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	20 mg/kg bw/day
7664-38-2	Phosphoric acid ... %; orthophosphoric acid			
Worker DNEL, long-term		inhalation	systemic	10,7 mg/m³
Worker DNEL, long-term		inhalation	local	1 mg/m³
Worker DNEL, acute		inhalation	local	2 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Refer to chapter 7. No further action is necessary.

Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace.
Take off immediately all contaminated clothing.
Wash hands before breaks and at the end of work.

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material: PE (polyethylene). CR (polychloroprenes, Chloroprene rubber). NBR (Nitrile rubber). Butyl rubber. FKM (Fluoroelastomer (Viton)).
penetration time (maximum wearing period): >480 min. Breakthrough times and swelling characteristics of the material must be taken into consideration.
Recommended protective gloves brand: Camapren 722, Manufacturer: KCL, or comparable makes from other companies.

Skin protection

Skin protection: not required.

Respiratory protection

Respiratory protection not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	clear, colourless
Odour:	characteristic

			Test method
pH-Value (at 20 °C):	1,5 (conc.)	3,6 (1 %)	DGF H-III 1

Changes in the physical state

Melting point:	-6 °C
Initial boiling point and boiling range:	100 °C
Flash point:	---

Explosive properties

not Explosive.

Oxidizing properties

not oxidizing.

Density (at 20 °C):	1,03 g/cm³	DIN 12791

Water solubility: complete miscible
(at 20 °C)

SECTION 10: Stability and reactivity

10.1. Reactivity

None, in case of proper use.

10.2. Chemical stability

The product is chemically stable under normal ambient conditions.

10.3. Possibility of hazardous reactions

None, in case of proper use.

10.4. Conditions to avoid

Thermal decomposition can lead to the escape of irritating gases and vapors.

10.5. Incompatible materials

Alkalis (alkalis), concentrated. Alkali metals.

10.6. Hazardous decomposition products

None, in case of proper use.

Further information

Do not mix with other products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether				
	oral	LD50 3305 mg/kg	rat		
	dermal	LD50 2764 mg/kg	rabbit		
68439-50-9	C12-C14 Fatty alcohol ethoxylate				
	oral	LD50 >2000 mg/kg	rat		Cesio-Recommendation
111798-26-6	Phosphoric acid ester, sodium-salt				
	oral	LD50 >2000 mg/kg	Ratte		
12645-31-7	Phosphoric acid-2 ethylhexylester				
	oral	LD50 >2000 mg/kg	Ratte		

Irritation and corrosivity

Causes serious eye damage.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Risk of serious damage to eyes.

Sensitising effects

Based on available data, the classification criteria are not met.
no danger of sensitization.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Technically correct releases of minimal concentrations to adapted biological sewage treatment facility , will not disturb the biodegradability of activated sludge. Product is acid. The product needs to apply neutralizing agents before draining to wastewater treatment plants.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
68439-50-9	C12-C14 Fatty alcohol ethoxylate						
	Algea toxicity	NOEC	<1 mg/l				
7664-38-2	Phosphoric acid ... %; orthophosphoric acid						
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis		
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Gambia magna		
111798-26-6	Phosphoric acid ester, sodium-salt						
	Acute fish toxicity	LC50	>10 mg/l	96 h			
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna		
12645-31-7	Phosphoric acid-2 ethylhexylester						
	Acute fish toxicity	LC50 mg/l	189-355	96 h	Danio rerio		

12.2. Persistence and degradability

The surfactants contained in this preparation 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.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
68439-50-9	C12-C14 Fatty alcohol ethoxylate			
	OECD 301F	>60 %	28	
	easily biodegradable			
12645-31-7	Phosphoric acid-2 ethylhexylester			
	OECD 301 B	>60 %		
	easy biodegradable			
	OECD 302 B	74 %	28	
	OECD 301 D	82 %	21	

12.3. Bioaccumulative potential

On the basis of existing data about disposal/decomposition and bio-accumulation potential, long term environmental damage is unlikely.

BCF

CAS No	Chemical name	BCF	Species	Source
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	<100		

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste disposal number of waste from residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Waste disposal number of used product

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Contaminated packaging

Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Other applicable information

Not a hazardous material with respect to transportation regulations.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 55: 2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether

2004/42/EC (VOC): 8 % (82,4 g/l)

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Data changed from previous versions: 2.1., 3.2., 8.1., 9.1., 11.1., 12.1., 12.2., 13.1., 15.1., 16.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

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.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Training instructions: Notice the directions for use on the label.

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	TICKOPUR TR 2	IS, PW	0	35	8a, 9, 13	8a, 8b	0	26	

LCS: Life cycle stages
SU: Sectors of use
PC: Product categories
PROC: Process categories
ERC: Environmental release categories
AC: Article categories
TF: Technical functions

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)