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

1.1. Product identifier

TICKOPUR R 32

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

Use of the substance/mixture

Cleaning agent. Special cleaner for the ultrasonic bath, without complexing agents, 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:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
Causes skin irritation.
Causes serious eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Phosphoric acid ester, sodium-salt
Disodium metasilicate pentahydrat

Signal word: Danger

Pictograms:

Hazard statements

H315	Causes skin irritation.
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			
7320-34-5	Tetrapotassium pyrophosphate			<9,0 %
	230-785-7		01-2119489369-18	
	Eye Irrit. 2; H319			
111798-26-6	Phosphoric acid ester, sodium-salt			<8,0 %
	-		*	
	Skin Irrit. 2, Eye Dam. 1; H315 H318			
10213-79-3	Disodium metasilicate pentahydrat			<4,0 %
	229-912-9		01-2119449811-37	
	Skin Corr. 1B, STOT SE 3; H314 H335			
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides			<1,0 %
	939-581-9		01-2119978229-22	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 3; H315 H318 H400 H412			

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 inhaling spray mists, consult a doctor .

After contact with skin

After contact with skin, wash immediately with plenty of 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).

5.3. Advice for firefighters

Protective clothing.

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

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

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

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7320-34-5	Tetrapotassium pyrophosphate			
Worker DNEL, long-term		inhalation	systemic	2,79 mg/m³
Consumer DNEL, long-term		inhalation	systemic	0,68 mg/m³
Consumer DNEL, long-term		oral	systemic	70 mg/kg bw/day
10213-79-3	Disodium metasilicate pentahydrat			
Consumer DNEL, long-term		oral	systemic	0,74 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	1,49 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,55 mg/m³
Worker DNEL, long-term		inhalation	systemic	6,22 mg/m³
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides			
Worker DNEL, long-term		inhalation	systemic	3,52 mg/m³
Worker DNEL, long-term		dermal	systemic	5,0 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,87 mg/m³
Consumer DNEL, long-term		dermal	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,05 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
7320-34-5	Tetrapotassium pyrophosphate	
Freshwater		0,05 mg/l
Marine water		0,005 mg/l
10213-79-3	Disodium metasilicate pentahydrat	
Freshwater		7,5 mg/l
Marine water		1 mg/l
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides	
Freshwater		0,0303 mg/l
Marine water		0,00303 mg/l
Freshwater sediment		0,214 mg/kg
Marine sediment		0,0214 mg/kg
Micro-organisms in sewage treatment plants (STP)		9,7 mg/l
Soil		0,000025 mg/kg

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. 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)).
Tested protective gloves are to be worn: EN 374

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):	12,9 (conc.)	9,9 (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):	1,12 g/cm³	DIN 12791
Water solubility:	complete miscible	

SECTION 10: Stability and reactivity

10.1. Reactivity

Exothermic reactions with: acid, concentrated.

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

acid, concentrated.

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
7320-34-5	Tetrapotassium pyrophosphate				
	oral	LD50 >2000 mg/kg	mouse		
	dermal	LD50 7940 mg/kg	rabbit		
111798-26-6	Phosphoric acid ester, sodium-salt				
	oral	LD50 >2000 mg/kg	Ratte		
10213-79-3	Disodium metasilicate pentahydrat				
	oral	LD50 1349 mg/kg	rat		
	dermal	LD50 5000 mg/kg	rat		
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides				
	oral	LD50 >2000 mg/kg	rat		
	dermal	LD50 >2000 mg/kg			

Irritation and corrosivity

Causes skin irritation.
Causes serious eye damage.
Risk of serious damage to eyes.
Irritant effect on the skin: irritant.

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. due to the alkaline character of the product, usually, it has to be neutralized before contaminated effluents are introduced into the waste water treatment system .

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
7320-34-5	Tetrapotassium pyrophosphate						
	Acute fish toxicity	LC50 mg/l	>100	96 h	Oncorhynchus mykiss		
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia 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		
10213-79-3	Disodium metasilicate pentahydrat						
	Acute fish toxicity	LC50 mg/l	3185	96 h			
	Acute crustacea toxicity	EC50 mg/l	1700	48 h	Daphnia magna		
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides						
	Acute fish toxicity	LC50 mg/l	0,68	96 h	Oncorhynchus mykiss		OECD 203
	Acute algae toxicity	ErC50 mg/l	0,705		Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 mg/l	19,9	48 h	Daphnia magna		OECD 202

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			
-	Amides, C12-18 (even numbered), N-[3-(dimethylamino) propyl], N'-oxides			
	OECD 301 B	68 %	28	

12.3. Bioaccumulative potential

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

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

2004/42/EC (VOC): 0 % (0g/l)

National regulatory information

Water contaminating class (D): 1 - slightly 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
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

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.

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 R 32	IS, PW	0	35	8a, 9, 13	8a	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.)