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

1.1. Product identifier

TICKOPUR RW 77

UFI: AJ10-9067-2004-RF7S

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

Use of the substance/mixture

Cleaning agent. Special cleaner with ammonia, for the ultrasonic bath, 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

GB CLP Regulation

Skin Irrit. 2; H315
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Sulfonic acids, C14-17-sec-alkane, sodium salts
C12-C14 Fatty alcohol ethoxylate
ammonia ... %

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 (GB CLP Regulation)			
7732-18-5	Water			60-70 %
	231-791-2			
68424-19-1	C16-C18 fatty acid TEA			<10,0 %
	270-279-3		*1	
	Eye Irrit. 2; H319			
68920-66-1	C16-C18 Fatty alcohol, ethoxylated			<10,0 %
	-		*	
	Eye Irrit. 2; H319			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			<6,0 %
	200-661-7		01-2119457558-25	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts			<6,0 %
	307-055-2		01-2119489924-20	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3; H302 H315 H318 H412			
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt			<4,0 %
	257-573-7		01-2119493601-38	
	Met. Corr. 1; H290			
68439-50-9	C12-C14 Fatty alcohol ethoxylate			<3,0 %
	-		*	
	Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 3; H302 H318 H412			
1336-21-6	ammonia ... %			<5,0 %
	215-647-6		01-2119488876-14	
	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1, STOT SE 3, Aquatic Acute 1; H290 H314 H318 H335 H400			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
68424-19-1	270-279-3	C16-C18 fatty acid TEA	<10,0 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >2000 mg/kg		
68920-66-1	-	C16-C18 Fatty alcohol, ethoxylated	<10,0 %
	oral: LD50 = >2000 mg/kg		
67-63-0	200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	<6,0 %
	inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = 13100 mg/kg; oral: LD50 = 5840 mg/kg		
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	<6,0 %
	dermal: LD50 = >2000 mg/kg; oral: LD50 = 500-2000 mg/kg		
51981-21-6	257-573-7	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt	<4,0 %
	oral: LD50 = >5000 mg/kg		
68439-50-9	-	C12-C14 Fatty alcohol ethoxylate	<3,0 %
	oral: LD50 = <2000 mg/kg		

Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % non-ionic surfactants.

Further Information

*Polymer

*1 Exempted from registration

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated clothing.

After inhalation

Provide fresh air.

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

General advice

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

Other information

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.

Advice on general occupational hygiene

Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work.

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
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	500 mg/m³
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts			
Worker DNEL, acute		dermal	local	2,8 mg/cm²
Worker DNEL, long-term		dermal	systemic	5 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	35 mg/m³
Worker DNEL, long-term		dermal	local	2,8 mg/cm²
Consumer DNEL, acute		dermal	local	2,8 mg/cm²
Consumer DNEL, long-term		dermal	systemic	3,57 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	12,4 mg/m³
Consumer DNEL, long-term		oral	systemic	7,1 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	2,8 mg/cm²
1336-21-6	ammonia ... %			
Worker DNEL, acute		inhalation	local	47,6 mg/m³
Consumer DNEL, acute		inhalation	local	23,8 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater (intermittent releases)		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Soil		28 mg/kg
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	
Freshwater		0,04 mg/l
Freshwater (intermittent releases)		0,06 mg/l
Marine water		0,004 mg/l
Freshwater sediment		9,4 mg/kg
Marine sediment		0,94 mg/kg
Soil		9,4 mg/kg
1336-21-6	ammonia ... %	
Freshwater		0,0011 mg/l

8.2. Exposure controls

Appropriate engineering controls

Refer to chapter 7. No further action is necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material:
PE (polyethylene).Layer thickness: 0,5 mm penetration time (maximum wearing period): >=8h
CR (polychloroprenes, Chloroprene rubber). 0,5 mm penetration time (maximum wearing period): >=8h
NBR (Nitrile rubber). 0,35 mm penetration time (maximum wearing period): >=8h
Butyl rubber. FKM (Fluoroelastomer (Viton)). 0,5 mm penetration time (maximum wearing period): >=8h

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, light yellow
Odour:	like: Ammonia

		Test method
Melting point/freezing point:	-6 °C	
Boiling point or initial boiling point and boiling range:	>100 °C	
Flash point:	---	
pH-Value (at 20 °C):	11,1 (conc.) 10,2 (1 %)	DGF H-III 1
Water solubility:	complete miscible	
Density (at 20 °C):	1,03 g/cm³	DIN 12791

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not Explosive.

Oxidizing properties

not oxidizing.

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 hazard classes as defined in GB CLP Regulation

Acute toxicity

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

ATEmix calculated

ATE (oral) 6024,1 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
68424-19-1	C16-C18 fatty acid TEA				
	oral	LD50 >2000 mg/kg	rat		
	dermal	LD50 >2000 mg/kg	rat		
68920-66-1	C16-C18 Fatty alcohol, ethoxylated				
	oral	LD50 >2000 mg/kg	Ratte		
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 5840 mg/kg	rat		OECD 401
	dermal	LD50 13100 mg/kg	kan		OECD 402
	inhalation (4 h) vapour	LC50 >20 mg/l	rat		OECD 403
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts				
	oral	LD50 500-2000 mg/kg	rat		OECD 401
	dermal	LD50 >2000 mg/kg	mouse		
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt				
	oral	LD50 >5000 mg/kg	rat		Calculated
68439-50-9	C12-C14 Fatty alcohol ethoxylate				
	oral	LD50 <2000 mg/kg	rat		Cesio-Recommendation

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
68424-19-1	C16-C18 fatty acid TEA						
	Acute fish toxicity	LC50	>100 mg/l	96 h	Leuciscus idus	Literature	
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnia magna	Literature	
68920-66-1	C16-C18 Fatty alcohol, ethoxylated						
	Acute fish toxicity	LC50	30 mg/l	96 h			(CESIO 10/2015 (Env. class.)
	Acute crustacea toxicity	EC50	>1000 mg/l	48 h	Daphnia magna		(CESIO 10/2015 (Env. class.)
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol						
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas	ECHA	OECD 203
	Acute bacteria toxicity	(EC50	>100 mg/l)				
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts						
	Acute fish toxicity	LC50	8,4 mg/l	96 h	Leuciscus idus		OECD 201
	Acute algae toxicity	ErC50	>61 mg/l	72 h	Desmodesmus subspicatus		OECD 201
	Acute crustacea toxicity	EC50	9,81 mg/l	48 h	Daphnia magna		OECD 202
	Fish toxicity	NOEC	0,85 mg/l	28 d	Oncorhynchus mykiss		OECD 204
	Crustacea toxicity	NOEC	0,36 mg/l	22 d	Daphnia magna		OECD 202
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt						
	Acute fish toxicity	LC50	>100 mg/l	96 h	Oncorhynchus mykiss		OECD 203
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Desmodesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnien		OECD 202
1336-21-6	ammonia ... %						
	Acute fish toxicity	LC50	0,89 mg/l	96 h		msds	
	Acute crustacea toxicity	EC50	48 mg/l	48 h		msds	
	Crustacea toxicity	NOEC	0,42 mg/l	21 d	Daphnia magna	msds	

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			
68920-66-1	C16-C18 Fatty alcohol, ethoxylated			
	OECD 301D	>70 %	28	
	Leicht biologisch abbaubar			
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts			
	OECD 301 B	78 %	28	
	leicht biologisch abbaubar			
	OECD 301 E	98 %	28	
	leicht biologisch abbaubar			
	OECD 303 A	96,2 %	34	
	leicht biologisch abbaubar			
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt			
	OECD 301D	76 %	28	
68439-50-9	C12-C14 Fatty alcohol ethoxylate			
	OECD 301F	>60 %	28	
	easily biodegradable			

12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt	-11,95

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
not applicable

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

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

List of Wastes Code - 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

List of Wastes Code - 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 3

2004/42/EC (VOC): 5,9 % (60,77 g/l)

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

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: 1.1., 1.4., 2.1., 3.2., 7.1., 8.2., 9.1., 9.2., 11.1., 12.1., 12.2., 12.5., 12.6., 12.7., 15.1., 16.

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

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.

Further Information

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

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

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	TICKOPUR RW 77	IS, PW, C	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.)