

Sanosil TPC-S

Revision date: 15.09.2023

Product number: 4001302000

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

1.1. Product identifier

Sanosil TPC-S

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

Use of the substance/mixture

Acid broadband descaler Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Company name:	Sanosil AG	
Street:	Eichtalstrasse 49	
Place:	CH-8634 Hombrechtikon	
Telephone:	055 254 00 54	Tel
e-mail:	kundeninfo@sanosil.ch	
Contact person:	Peter Gömöri	
Internet:	www.sanosil.ch	

Telefax: 055 254 00 59

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation Skin Corr. 1; H314

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

hydrocarbon acid 2- hydroxyethanoic acid methylsulphonic acid Ethylhexyl hydrogen sulfate

Signal word:

Pictograms:



Danger

Hazard statements

H314

Causes severe skin burns and eye damage.

Precautionary statements

ecautionaly statemen	
P260	Do not breathe vapours.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
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/doctor.
P405	Store locked up.



according to UK REACH Regulation

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P501

Dispose of contents/container to industrial incineration plant.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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)		•	
64-18-6	hydrocarbon acid			5 - < 10 %
	200-579-1	607-001-00-0	01-2119491174-37	
	Flam. Liq. 3, Acute Tox. 3, Acute To	ox. 4, Skin Corr. 1A; H226	6 H331 H302 H314	
5949-29-1	citric acid	5 - < 10 %		
	201-069-1			
	Eye Irrit. 2; H319	•	•	
79-14-1	2- hydroxyethanoic acid	1 - < 2.5 %		
	201-180-5		01-2119485579-17	
	Met. Corr. 1, Acute Tox. 4, Skin Co	rr. 1B; H290 H332 H314	•	
75-75-2	methylsulphonic acid			1 - < 2.5 %
	200-898-6	607-145-00-4		
	Met. Corr. 1, Acute Tox. 4, Acute T H335	ox. 4, Skin Corr. 1B, STO	T SE 3; H290 H312 H302 H314	
126-92-1	Ethylhexyl hydrogen sulfate	1 - < 2.5 %		
	Skin Irrit. 2, Eye Dam. 1; H315 H31			

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				
64-18-6	200-579-1	hydrocarbon acid	5 - < 10 %			
	730 mg/kg S	50 = 7.85 mg/l (vapours); inhalation: ATE = 0.5 mg/l (dusts or mists); oral: LD50 = kin Corr. 1A; H314: >= 90 - 100 Skin Corr. 1B; H314: >= 10 - < 90 Skin Irrit. 2; : 10 Eye Irrit. 2; H319: >= 2 - < 10				
5949-29-1	201-069-1	citric acid	5 - < 10 %			
	oral: LD50 = :	> 7000 mg/kg				
79-14-1	201-180-5	2- hydroxyethanoic acid	1 - < 2.5 %			
	inhalation: LC 2000 mg/kg	50 = 3.6 mg/l (vapours); inhalation: ATE = 1.5 mg/l (dusts or mists); oral: LD50 = >				
75-75-2	200-898-6	methylsulphonic acid	1 - < 2.5 %			
	dermal: LD50 = > 1000 mg/kg; oral: LD50 = 649 mg/kg					
126-92-1		Ethylhexyl hydrogen sulfate	1 - < 2.5 %			
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 2840 mg/kg				

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

< 5 % anionic surfactants.

SECTION 4: First aid measures

4.1. Description of first aid measures



according to UK REACH Regulation

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General information

In all cases of doubt, or when symptoms persist, seek medical advice. If medical advice is needed, have product container or label at hand.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Stomach perforation. Do not allow a neutralisation agent to be drunk. Call a physician immediately.

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

No known symptoms to date. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Foam, Carbon dioxide (CO2), Dry extinguishing powder, Water spray.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). After cleaning, flush away traces with water. The product needs to apply neutralizing agents before draining to wastewater treatment plants. Treat the recovered material as prescribed in the section on waste disposal. Dispose according to legislation.



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6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

After use replace the closing cap immediately. Avoid contact with skin and eyes. Wear personal protection equipment. Observe instructions for use. Use only in well-ventilated areas.

Advice on protection against fire and explosion

The product is not: Combustible. The product is not: Explosive.

Advice on general occupational hygiene

Keep eye rinsing device ready. Avoid contact with skin and eyes. Avoid breathing vapours/spray. Change contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Apply skin care products after work.

Further information on handling

No special handling instructions are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Protect from direct sunlight. Store in a cool dry place. Recommended storage temperature: at room temperature. Store in a place accessible by authorized persons only. Keep container in a well-ventilated place.

Hints on joint storage

Do not store together with: Alkali (lye), Food and fodder.

Further information on storage conditions

Minimum storage temperature: 5°C Maximum storage temperature: 30°C

Storage class (TRGS 510):

8B (Non-combustible corrosive substances)

7.3. Specific end use(s)

Follow the instructions for use on the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-18-6	Formic acid	5	9.6		TWA (8 h)	WEL



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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
64-18-6	hydrocarbon acid			
Worker DNEL,	long-term	inhalation	local	9.5 mg/m ³
Worker DNEL,	acute	inhalation	local	19 mg/m³
Worker DNEL,	long-term	inhalation	systemic	9.5 mg/m ³
Worker DNEL,	acute	inhalation	systemic	19 mg/m³
Consumer DN	EL, long-term	inhalation	local	3 mg/m³
Consumer DN	EL, long-term	inhalation	systemic	3 mg/m³
Consumer DN	EL, acute	inhalation	local	9.5 mg/m³
Consumer DN	EL, acute	inhalation	systemic	9.5 mg/m³
126-92-1	Ethylhexyl hydrogen sulfate			
Worker DNEL,	long-term	inhalation	systemic	285 mg/m ³
Worker DNEL,	long-term	dermal	systemic	4060 mg/kg bw/day
Consumer DNI	EL, long-term	inhalation	systemic	85 mg/m³
Consumer DNI	EL, long-term	dermal	systemic	2440 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	24 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmen	tal compartment	Value
64-18-6	hydrocarbon acid	
Freshwater		2 mg/l
Freshwater	(intermittent releases)	1 mg/l
Marine wate	r	0.2 mg/l
Freshwater	sediment	13.4 mg/kg
Marine sedi	nent	1.34 mg/kg
Micro-organisms in sewage treatment plants (STP)		7.2 mg/l
Soil		1.5 mg/kg
126-92-1	Ethylhexyl hydrogen sulfate	
Freshwater		0.136 mg/l
Marine wate	r	0.0136 mg/l
Freshwater	sediment	1.5 mg/kg
Marine sediment		0.15 mg/kg
Micro-organ	isms in sewage treatment plants (STP)	1.35 mg/l
Soil		0.22 mg/kg

8.2. Exposure controls



Individual protection measures, such as personal protective equipment



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Eye/face protection

Tightly sealed safety glasses. Eye-pieces out of plastic. EN 166

Hand protection

Recommended gloves for permanent contact: Tested protective gloves must be worn (EN ISO 374). Suitable material: Butyl caoutchouc (butyl rubber) Thickness of the glove material: >= 0,7 mm Breakthrough time:: <= 480 min Observe the wear time limits as specified by the manufacturer.

Recommended gloves for splash protection: Tested protective gloves must be worn (EN ISO 374). Suitable material: NBR (Nitrile rubber) Thickness of the glove material: >= 0,4 mm Breakthrough time:: <= 30 min Observe the wear time limits as specified by the manufacturer.

Skin protection

Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

Usually no personal respirative protection necessary. Avoid breathing vapours/spray. Respiratory protection necessary at: exceeding exposure limit values, aerosol or mist formation. Suitable respiratory protection apparatus: A2-P2 Combination filtering device

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	red	
Odour:	characteristic	
Boiling point or initial boiling point and		No data available
boiling range:		
Flash point:		No data available
pH-Value:		0.0 - 1.0
Water solubility:		completely miscible
Density:		1.050 - 1.090 g/cm³
O oth an information		

9.2. Other information

none

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Alkalis (alkalis).

10.4. Conditions to avoid

Protect against: Frost, Heat. Protect from sunlight.

10.5. Incompatible materials

May be corrosive to metals.



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10.6. Hazardous decomposition products

This article doesn't contain dangerous substances or preparations intended to be released under normal or reasonably foreseeable conditions of use.

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.

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
64-18-6	hydrocarbon acid					
	oral	LD50 mg/kg	730	Rat		
	inhalation (4 h) vapour	LC50	7.85 mg/l	Rat		
	inhalation dust/mist	ATE	0.5 mg/l			
5949-29-1	citric acid					
	oral	LD50 mg/kg	> 7000	Rat		
79-14-1	2- hydroxyethanoic acid					
	oral	LD50 mg/kg	> 2000	Rat		
	inhalation (4 h) vapour	LC50	3.6 mg/l	Rat		
	inhalation dust/mist	ATE	1.5 mg/l			
75-75-2	methylsulphonic acid					
	oral	LD50 mg/kg	649	(Rat)		
	dermal	LD50 mg/kg	> 1000	(Rabbit)		
126-92-1	Ethylhexyl hydrogen sulf	ate				
	oral	LD50 mg/kg	2840	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		

Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data) Causes serious eye damage. (On basis of test data)

Sensitising effects

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

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.

Additional information on tests

Classification according to Regulation (EC) No 1272/2008 [CLP] Calculation method. The product has not been



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tested.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
64-18-6	hydrocarbon acid						
	Acute fish toxicity	LC50	130 mg/l	96 h	Danio rerio (zebrafish)	OECD 203	
	Acute algae toxicity	ErC50 mg/l	1240	72 h	Selenastrum capricornutum	OECD 201	
	Acute crustacea toxicity	EC50	365 mg/l	48 h	Daphnia magna	OECD 202	
	Fish toxicity	NOEC mg/l	>=100	21 d	Daphnia magna (Big water flea)	OECD 211	
5949-29-1	citric acid				-		
	Acute fish toxicity	LC50 760 mg/l	440 -	96 h	Leuciscus idus (golden orfe)		
	Acute crustacea toxicity	EC50 mg/l	ca. 120	48 h	Daphnia magna		
79-14-1	2- hydroxyethanoic acid						
	Acute fish toxicity	LC50	115 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 mg/l	15.3	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50 mg/l	99.6	48 h	Daphnia magna		OECD 202
75-75-2	methylsulphonic acid						
	Acute fish toxicity	LC50	73 mg/l	96 h	(Oncorhyncus mykiss)		
	Acute algae toxicity	ErC50 mg/l	12 - 24	72 h	(Selenastrum capricomutum)		
	Acute crustacea toxicity	EC50 mg/l	10 - 100	48 h	(Daphnia magna)		
126-92-1	Ethylhexyl hydrogen sulfa	ite					
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50 mg/l	> 511	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50	483 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC mg/l	> 1357	42 d	Pimephales promelas (fathead minnow)		
	Crustacea toxicity	NOEC	1.4 mg/l	21 d	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(EC50 mg/l)	135	3 h			

12.2. Persistence and degradability

The product has not been tested. The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.



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CAS No	Chemical name							
	Method	Value	d	Source				
	Evaluation							
64-18-6	hydrocarbon acid							
	Biodegradable. OECD 301	100 %	9					
	Easily biodegradable (concerning to the criteria of the OECD)							
5949-29-1	citric acid							
	Biological degradation:	> 98%	2					
	OECD 302C	-		-				
126-92-1	Ethylhexyl hydrogen sulfate							
	OECD 301B	89 %	28					
	Readily biodegradable (according to OECD criteria).							

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-18-6	hydrocarbon acid	-2.1
126-92-1	Ethylhexyl hydrogen sulfate	-0.248
BCE		

BCF

CAS No	Chemical name	BCF	Species	Source
64-18-6	hydrocarbon acid	3.2		

12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

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

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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

There are no data available on the mixture itself.

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP] Calculation method. The product has not been tested.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Delivery to an approved waste disposal company.

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

List of Wastes Code - contaminated packaging



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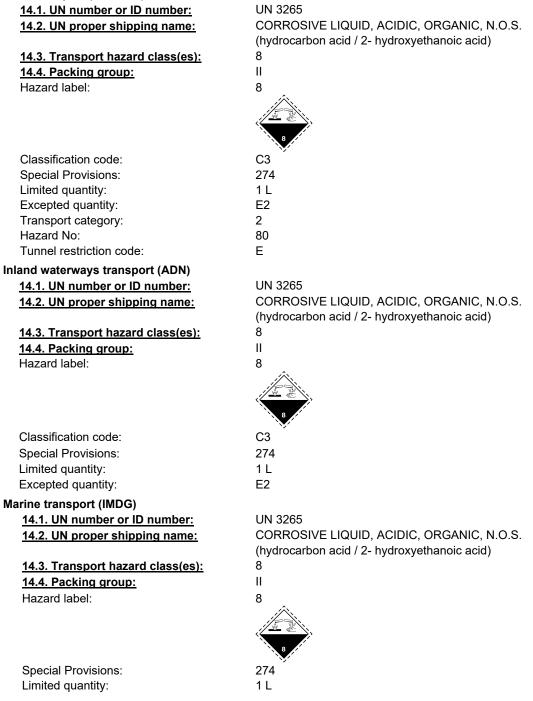
200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

Contaminated packaging

Completely emptied packages and rinsed out with plenty of water can be disposed of as refuse. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)





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Excepted quantity:	E2	
EmS:	F-A, S-B	
Segregation group:	1 - acids	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:	UN 3265	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (hydrocarbon acid / 2- hydroxyethanoic acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:		
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	0.5 L	
Passenger LQ:	Y840	
Excepted quantity:	E2	
IATA-packing instructions - Passenger:	851	
IATA-max. quantity - Passenger:	1 L 855	
IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	30 L	
	30 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regu	lations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII):		
Entry 3, Entry 40, Entry 75		
National regulatory information		
Water hazard class (D):	1 - slightly hazardous to water	
Status:	Classification of mixtures according to AwSV annex 1, no. 5 (D)	
Additional information		
Water hazard class (CH): Class B (Sel	lf-classification)	
15.2. Chemical safety assessment		
	stances in this mixture were not carried out.	
,		

SECTION 16: Other information

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

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.



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H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H332	Harmful if inhaled.	

HOOL	i la martina i martina da
H335	May cause respiratory irritation.

Further Information

For industrial purposes only. Follow the instructions for use on the label. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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