

Trade name :	
Revision date :	
Print date :	

Limescale Barracuda 23.03.2023 30.03.2023

Version (Revision) :	2.1.2 (2.1.1)
	2.1.2 (2.1.1)

	TION 1: Identification of the substance/mixture and of the company/ undertak
1	Product identifier
	Limescale Barracuda
2	Relevant identified uses of the substance or mixture and uses advised against
	Relevant identified uses
	PC 35 - Washing and cleaning products
	Sectors of use [SU] Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
	Industrial uses
.3	Details of the supplier of the safety data sheet
	Supplier
	Bio-Circle Surface Technology AG
	Street : Aahusweg 16
	Postal code/City: 6403 Küssnacht am Rigi
	Telephone: 0041 41 878 1166
	Telefax : 0041 41 878 1347
	Information contact : service@bio-circle.ch
.4	Emergency telephone number
	+41 (0)442515151
	Schweizerisches Toxikologisches Informationszentrum, 145
	Classification of the substance or mixture
2.1 2.2 2.3	Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP] None Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Special rules for supplemental label elements for certain mixtures EUH210 Safety data sheet available on request. Other hazards None
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1 2 3	TION 2: Hazards identification Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP] None Label elements Labelling according to Regulation (EC) No. 1272/2008 [CLP] Special rules for supplemental label elements for certain mixtures EUH210 Safety data sheet available on request. Other hazards None TION 3: Composition/information on ingredients
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General information



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When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

Following inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

Protect uninjured eye. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

- 4.2 Most important symptoms and effects, both acute and delayed
 - Frequently or prolonged contact with skin may cause dermal irritation.
- 4.3 Indication of any immediate medical attention and special treatment needed None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO2) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

- 5.2 Special hazards arising from the substance or mixture Hazardous combustion products In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO2)
- 5.3 Advice for firefighters

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

 5.4 Additional information
 - The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 **Personal precautions, protective equipment and emergency procedures** Special danger of slipping by leaking/spilling product.

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

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water. Treat the recovered material as prescribed in the section on waste disposal.

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 Keep container tightly closed.



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7.2 Conditions for safe storage, including any incompatibilities Keep/Store only in original container. Protect against : Frost .

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CITRIC ACID ; CAS No. : 77-92-9 Limit value type (country of origin) : TLV/STEL (CH) Limit value : 4 mg/m³ Version : Limit value type (country of origin) : TLV/TWA (CH) Limit value : 2 mg/m³ Version :

8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection EN 166.

Skin protection

Hand protection



Suitable gloves type : EN 374.

Suitable material : NBR (Nitrile rubber)

Breakthrough time : 480 min.

Thickness of the glove material : $0.4\ mm$

Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values Usually no personal respirative protection necessary.

Suitable respiratory protection apparatus

Combination filtering device

Type : P2

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection



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apparatus (BGR 190).

General information

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 - Wash hands thoroughly after handling.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : colourless

Odour

characteristic

Safety characteristics

Melting point/freezing point :	(1013 hPa)		not determined		
Initial boiling point and boiling range	(1013 hPa)	approx.	100	°C	
Flash point :			not relevant		DIN EN ISO 13736
Auto-ignition temperature :			none		
Flammability :			non-flammable		
Lower explosion limit :			not relevant		
Upper explosion limit :			not relevant		
Vapour pressure :	(50 °C)		not relevant		
Density :	(20 °C)		1,04	g/cm ³	
Water solubility :	(20 °C)		completely miscible		
pH :	(20 °C)	>	2		
Cinematic viscosity :	(20 °C)	<	30	mm²/s	
Relative vapour density :	(20 °C)		not determined		
Maximum VOC content (EC) :			0	Weight-%	
Maximum VOC content (Switzerland) :	1	<	3	Weight-%	
Taxable VOC content (Switzerland) :		<	3	Weight-%	
Other information				2	

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

- No information available.
- 10.5 **Incompatible materials** No information available.

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10.6		nposition products	
		decomposition products. cts in case of fire: see section 5.	
CEC.	TION 11. Toxico	ogical information	
11.1		azard classes as defined in	Regulation (EC) No 1272/2008
	Acute toxicity		
	Acute oral toxicity Parameter :	ATEmix	
	Exposure route :	Oral	
	Effective dose :	> 2000 mg/kg	
	Parameter :	00	D ; CAS No. : 77-92-9)
	Exposure route :	Oral	, /
	Species :	Rat	
	Effective dose :	> 2000 mg/kg	
	Corrosion		
	Skin corrosion/irr	ation	
		information available.	
	Serious eye dama		
	-	information available.	
	Respiratory or	kin sensitisation	
	Skin sensitisation		
		information available.	
	Sensitisation to th		
		information available.	
			and toxicity for reproduction)
	Carcinogenicity	remogementy, matagementy	and toxicity for reproduction,
	• •	information available.	
	Germ cell mutage		
	•	information available.	
	Reproductive toxi		
	-	information available.	
	STOT-single ex		
	-		
		nformation available.	
	STOT-repeated	•	
		nformation available.	
	Aspiration haza	ď	
	No further relevant	nformation available.	
11.2	Information on c	her hazards	
	Endocrine disru	pting properties	
			ocrine disrupting properties with respect to humans as no
	components meets		
	Toxicokinetics,	metabolism and distributio	n
		vailable on the preparation/mixture i	
	Other adverse e		
			ed contact with skin may cause dermal irritation.
	Additional infor		ou contact with okin may budge derma initiation.
			a proportion of the single components
	Preparation not tes	ed. The statement is derived from th	e properties of the single components.
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SEC	TION 12: Ecologic	cal information		
12.1	Toxicity			
	No information availab	le.		
12.2	Persistence and d	egradability		
	Biodegradation			
	Parameter :	CO2 formation (%	of the theoretical value) (CITRIC ACID ; CAS No.	: 77-92-9)
	Inoculum :	Biodegradation		
	Evaluation parameter			
	Degradation rate :	97 %		
	Test duration :	28 D Deadily biodegrad	lable (according to OFCD eviteria)	
	Evaluation : Method :	OECD 301B	lable (according to OECD criteria).	
	Parameter :		CITRIC ACID ; CAS No. : 77-92-9)	
	Inoculum :	Biodegradation	······································	
	Evaluation parameter	: Aerobic		
	Degradation rate :	100 %		
	Test duration :	19 D		
	Evaluation :	Readily biodegrac OECD 301E	lable (according to OECD criteria).	
	Method : According to the recir		tants contained in this mixture comply with the t	hindegradability
		n Regulation (EC) No.648/2004		oloucyradability
12.3	Bioaccumulative		-	
	No indication of bioacc			
12.4	Mobility in soil			
	No information availab	le.		
12.5	Results of PBT an	d vPvB assessment		
			PvB criteria according to REACH, annex XIII.	
12.6	Endocrine disrupt		· _ · · · · · · · · · · · · · · · · · ·	
		contain a substance that has en	docrine disrupting properties with respect to nor	n-target organisms
12.7	Other adverse effe			
	No further relevant info			
SEC	TION 13: Disposa	l considerations		
13.1	Waste treatment n			
			al of waste (ADWO) SR 814.600.	
	Before intended use		and of works	
		ling to the lists for the movem		
		us washing liquids and mother li ents containing hazardous subs		
	Other disposal reco	0		
	Dispose of waste ac disposal facility. Cor	cording to applicable legislation	. Dispose of contents/container to an appropriat ompletely emptied and can be re-used following the substance itself.	
13.2	Additional information			

The allocation of waste identity numbers/waste descriptions must be carried out according to the VVEA, specific to the industry and process.

SECTION 14: Transport information

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14.1	UN number			
	No dangerous	good in sense of these transport regulation	IS.	
14.2		hipping name		
	-	good in sense of these transport regulation	ns.	
14.3	•	azard class(es)		
	-	good in sense of these transport regulation	าร.	
14.4	Packing gro			
		good in sense of these transport regulation	ns.	
14.5	Environmen			
	-	good in sense of these transport regulation	1 5.	
14.6	• •	autions for user		
	None		· · · · · · · · · · · · · · · · · · ·	
14./		nsport in bulk according to IMO	Instruments	
	No transport as	s bulk according to IBC Code.		
SEC	TION 15. Re	gulatory information		
		galacery mornation		
15.2	Restrictions Use restrict Other regulat Labelling fo < 5 % non- perfumes National regulat Other regulat Switzerland Chemicals Chemical Sa	ns and/or restrictions on use s on use tion according to REACH annex XVII, no. : tions (EU) or contents according to regulation (EC) ionic surfactants ations tions, restrictions and prohibition regul	No. 648/2004 ations 814.81)	
SEC	TION 16: Ot	her information		
16.1	Indication of	-		
	disrupting prop	erties	s · 11. Endocrine disrupting properties · 12. E	indocrine
16.2	ADR: Accord e	1s and acronyms uropéen sur le transport des marchandise g gefährlicher Güter auf der Straße)	s dangereuses par Route (Europäisches Üb	ereinkommen über
	AOX: adsorbier	rbare organisch gebundene Halogene		
		nung über Anlagen zum Umgang mit wass I Abstracts Service (Unterabteilung der An		
			g, Kennzeichnung und Verpackung von Stoff	en und Gemischen
	(Classification I	Labelling and Packaging)		
		ropäischer Abfallartenkatalog / Abfallverze		
	ECHA: Europä	ische Chemikalienagentur (European Che	micals Agency)	

EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances) GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System

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	ICAO: Internationale Zi IMDG: Gefahrgutkennz Goods) RID: Regelung zur inte transport international i TRGS: Technische Re VbF: Verordnung über VOC: flüchtige organis VVEA: Verordnung über	ftverkenrs-Vereinigung (International Air Transport Association) villuftfahrtorganisation (International Civil Aviation Organization) teichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous rmationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le ferroviaire de marchandises dangereuses) gel für den Umgang mit Gefahrstoffen brennbare Flüssigkeiten che Verbindung (volatile organic compound) er die Vermeidung und die Entsorgung von Abfällen orschrift wassergefährdender Stoffe
16.3	DGUV: GESTIS-Stoffd ECHA: Classification A ECHA: Pre-registered ECHA: Registered Sub EC_Safety Data Sheet ESIS: European Chem GDL: Gefahrstoffdaten UBA Rigoletto: Wasser Regulation (EC) No. 15	nd Labelling Inventory Substances istances of Suppliers ical Substances Information System bank der Länder
16.4	0 ()	mixtures and used evaluation method according to regulation (EC) No
	The mixture is classifie	d as not hazardous according to regulation (EC) No 1272/2008 [CLP].
16.5	Relevant H- and E	UH-phrases (Number and full text)
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
16.6	Training advice	
	None	

16.7 Additional information

None

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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.