	of issue: 14.06.2018 Replaces I terations as compared to previou		cable; n.av. = not available	ceragol	
SECT	ION 1: Identification of the	substance/mixture and	of the company/undertaking		
1.1	Product identifier Trade Name: Article No.: Preparation No.:	<b>ceragol Ultra® P</b> A080130111 003	remium Entkalker 6 Additive		
	Registration No.:	n.ap.			
1.2 1.3 1.3.1	Relevant identified uses of Identified uses: descaler Details of the supplier of the	e safety data sheet	and uses advised against		
1.3.1	Address of the Company / Supplier: ceragol international GmbH, Grundstrasse 41, CH- 8196 Wil Telephone: +41 (0)44 879 16 31, Telefax: +41 (0)44 879 16 32, E-Mail: safety@ceragol.com Responsible for the data sheet:				
	CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cosichem.de				
1.4	Emergency telephone numl Emergency - Telephone of Co	ompany / Undertaking	Information Centre Specialisi of Poisoning	ng in Symptoms	
	Telephone: +41 (0)44 879 16 31 (	(8:00 – 16:30)	Telephone: +44 870 600 6266		
SECT	ION 2: Hazards identification				
2.1	Classification of the substa				
	None.				
2.2	Label elements   Classification according to 1272/2008/EC: No.   According to present data no classification and labelling is required according to Regulation (EC) 1272/2008   Applicable Exemptions:   Signal word(s):				
	Component(s):			gram(s).	
	H - Phrases:				
	<b>P - Phrases:</b> P102: Keep out of reach of ch P305+P351+P338: IF IN EYE Remove contact lenses, if pre P302+P352: IF ON SKIN: Wa	ES: Rinse cautiously with wat esent and easy to do. Contin ash with plenty of water.	ue rinsing.		
Although this product does not require a hazard warning label, we rec be observed.			y advice should		
	Additional Markings:				
	The above mentioned labellin	ig is valid for distribution to p	ublic use.		
2.3	<b>Other hazards</b> Repeated or prolonged conta resulting in non-allergic conta This mixture contains no subs	act dermatitis and absorption		ie skin	

Page 2 of 6

#### Trade Name: ceragol Ultra® Premium Entkalker 6 Additive

Company / Supplier: ceragol international GmbH, Grundstrasse 41, CH- 8196 Wil Telephone: +41 (0)44 879 16 31, Date of issue: 14.06.2018 Replaces Data Sheet of: 20.07.2017

.2	n.ap. Mixtures Chemical Characterisation Mixture aqueous solution Dangerous Ingredients: Material CAS - No. Index - Hazard Code(s) / H - phrases Sulphamidic acid 5329-14-6 016-02		:C - No.	REACH - No.	m% -
.2	Chemical Characterisation   Mixture aqueous solution   Dangerous Ingredients:   Material   CAS - No. Index -   Hazard Code(s) / H - phrases   Sulphamidic acid   5329-14-6 016-02		:C - No.	REACH - No	m% -
	MaterialCAS - No.Index -Hazard Code(s) / H - phrasesSulphamidic acid5329-14-6016-02	No. E	EC - No.	REACH - No	m% -
	CAS - No. Index - Hazard Code(s) / H - phrases Sulphamidic acid 5329-14-6 016-02	No. E	EC - No.	REACH - No	m% -
	5329-14-6 016-02				range
	Eye Irrit. 2; H319 / Skin Irrit. 2;		26-218-8 Ironic 3; H412	01-2119488633-28-xxxx	1 - 10%
	<b>2,2'-(Octadec-9-enylimino)bis</b> 25307-17-9 n.av. Acute Tox. 4; H302 / Skin Corr.	24	46-807-3 Acute 1; H400	n.av.	0,1 - 1%
	Text of H - phrases: see section $m\%$ - range: $x - y \triangleq x \ge - < y$	16			
ECTI	ON 4: First aid measures				
.1	Description of first aid me	asures			
.1.1	<b>Inhalation:</b> Move to fresh air in case of accidental inhalation of vapours or decomposition products. If symptoms persist, call a physician.				
.1.2	Skin Contact: Rinse with water If sympton	ns nersist call a	nhysician		
.1.3	Rinse with water. If symptoms persist, call a physician. <b>Eye Contact:</b> In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids				
.1.4	for at least 15 minutes. If ey Ingestion:	e irritation persis	sts, consult a specia	alist.	
<del>.</del>	Clean mouth with water and Call a physician immediately				
.2	Most important symptoms				
.3	Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance. Indication of any immediate medical attention and special treatment needed Treat symptomatically.				
ECTI	ON 5: Firefighting measu	res			
.1	Extinguishing media				
.1.1	Suitable Extinguishing Me				
.1.2	Use dry chemical, CO <sub>2</sub> , wate Extinguishing Media to Av		hol" foam.		
. 1.2	None.	oiu.			
.2	Special hazards arising fro				
	In the event of fire the follow				
2	Carbon oxides nitrogen oxid	es (NO <sub>x</sub> ) sulphur	r oxides oxides of p	hosphorus ammonia.	
.3	Advice for firefighters Special Protective Equipm	ent.			
31	Wear positive pressure self-		hing apparatus. We	ar full protective clothing.	
.3.1	Additional Information:				h local
.3.1 .3.2	Fire residues and contamina regulations.		0	·	
	Fire residues and contamina		J		
	Fire residues and contamina		J		

Page 3 of 6

		Premium Entkalker 6 Additive ternational GmbH, Grundstrasse 41, CH- 8196 Wil			
		1, Date of issue: 14.06.2018 Replaces Data Sheet of: 20.07.2017			
SECTI	ON 6: Accidental relea	ase measures			
6.1		protective equipment and emergency procedures			
	See chapter 8.2.2	will be extremely slippery.			
6.2					
	e water or sanitary sewer system. Do not allow material to contaminate ground water				
	system. Local authorities should be advised if significant spillages cannot be contained.				
6.3		for containment and cleaning up			
		a wide area (e.g. by containment or oil barriers). rbent material (e.g. sand, universal binder, sawdust).			
	Sweep up or vacuum up	p spillage and collect in suitable container for disposal.			
6.4	Reference to other see	ference to other sections			
	None.				
SECTI	ON 7: Handling and s				
7.1	Precautions for safe h				
7.1.1 <b>Precautions for Safe Handling:</b> Avoid contact with skin and eyes. When using, do not eat, drink or smoke.					
		and eyes. When using, do not eat, dnink of shoke. aks and at the end of workday. Take off all contaminated clothing immediately.			
		add the product to water. Never add water to the product.			
7.1.2	Precautions in Case of Fire and Explosion:				
7.0	Normal measures for preventive fire protection.				
7.2 7.2.1	Conditions for safe storage, including any incompatibilities Storage Instructions:				
7.2.1	Keep containers tightly closed in a cool, well-ventilated place. Avoid subsoil penetration.				
7.2.2	Store away from:				
	Do not store together with oxidizing agents bases.				
7.2.3	Further Information on Storage Conditions: None.				
7.3	Specific end use(s)				
	n.av.				
SECTI	-	rols/personal protection			
8.1	Control parameters Material	Limit Value			
8.2	Exposure controls				
8.2.1	Appropriate engineeri	ng controls			
-		naust ventilation at machinery.			
8.2.2	Individual protection r	neasures			
8.2.2a		n: Not required under normal use.			
		In case of insufficient ventilation, wear suitable respiratory equipment.			
8.2.2b	Hand Protection:	Repeated or prolonged exposure: Protective gloves complying with EN 374. Butyl-rubber Neoprene (0,4 mm) break through time > 8 h			
		The data about break through time/strength of material are standard values!			
		The exact break through time/strength of material has to be obtained from the			
		producer of the protective glove.			
		Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the			
		specific local conditions under which the product is used, such as the danger of			
		cuts, abrasion, and the contact time.			
8.2.2c	Eye Protection:	In case of contact through splashing: safety glasses			
8.2.2d 8.2.2e	Skin Protection: Further Information:	None. Observe wearing time limits:			
8.2.3		-			
0.2.0	Environmental exposu n.av.				

Page 4 of 6

	ON 9: Physical and chemical propert						
.1 .1.1	Information on basic physical and chemical properties			atia			
	Form: liquidColour: colourlessOdour: characteristic						
			Odour threshold: n.av.				
.1.2	pH-value, undiluted:	< 1					
4.0	pH-value, 1% aqueous solution:	n.av.					
1.3 1.4	Boiling point / Boiling - range (°C): n.av., Melting point / Melting range (°C): n.av.   Flash point (°C): n.ap., closed cup						
1.5	Flammability (EEC A10/A13):	No.	þ				
.1.6	Ignition temperature (°C): n.av.						
.1.7	Autoflammability (EEC A16):	n.av.					
.1.8	Oxidising properties:	No.					
.1.9	Explosion hazard:	No.					
.1.10 .1.11	Explosion limits (Vol.%) lower: Vapour pressure:	n.av., upper: n.a	1V.				
	Vapour density (Air = 1):	n.av. n.av.					
.1.12	Density (g/ml):	~ 1					
.1.13	Solubility (in Water):	miscible					
.1.14	Partition coefficient, n-Octanol / Water:	n.av.					
.1.15	Viscosity:	n.av.					
.1.16	Solvent content (m %):	n.ap.					
.1.17 .1.18	Thermal decomposition (°C): Evaporation rate:	n.av. n.av.					
.1.10	Other information	11.av.					
-	n.av.						
	ON 10: Stability and reactivity						
0.1	Reactivity						
0.2	No information available. Chemical stability						
J.Z	Stable under normal conditions.						
0.3	Possibility of hazardous reactions						
	No dangerous reaction known under cond	litions of normal use	Э.				
	Conditions to avoid						
0.4	No conditions to be specially mentioned.						
0.4 0.5	Incompatible materials	h		Incompatible with oxidizing agents, strong bases.			
0.5	Incompatible materials Incompatible with oxidizing agents, strong	bases.					
).5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products						
).5	Incompatible materials Incompatible with oxidizing agents, strong	s directed.					
).5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products No decomposition if stored and applied as	s directed.					
).5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products No decomposition if stored and applied as	s directed.					
).5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products No decomposition if stored and applied as	s directed.					
).5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products No decomposition if stored and applied as	s directed.					
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.5	Incompatible materials Incompatible with oxidizing agents, strong Hazardous decomposition products No decomposition if stored and applied as	s directed.					
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Page 5 of 6

Teleph	one: +41 (0)44 879 16 31, Date of issue	e: 14.06.2018 Replaces Data Sheet of: 20.07.2017			
SECTI	ON 11: Toxicological information				
1.1	Information on toxicological effects				
	Acute Health Effects:				
	Inhalation:	n.av.			
	Ingestion:	sulphamidic acid: LD₅₀/oral/rat: 3160 mg / kg (RTECS)			
	Skin Contact:	n.av.			
	Skin corrosion / irritation:	None.			
	Serious eye damage / irritation:	None (OECD 437) <sup>1)</sup>			
	Respiratory or skin sensitisation:	No.			
	Germ cell mutagenicity:	n.av.			
	Carcinogenicity:	n.av.			
	Reproductive toxicity:	n.av.			
	STOT-single exposure:	n.av.			
	STOT-repeated exposure:	n.av.			
	Aspiration hazard:	n.av.			
111_	Practical Experience				
1.1.1					
1.1.12	Practical Experience				
	Observations relevant for classification				
	None.				
	Further Observations:				
	None.				
	Information given is based on data obta	ained from similar substances.			
ECTI	ON 12: Ecological information				
2.1	ON 12: Ecological information Toxicity				
2.1		ng the ecological effects of this product.			
	Sulphamidic acid: $LC_{50}$ /96h/Fathead m				
2.2		11110ws = 14,2 111g/1 / 70,3 111g/1			
2.2	Persistence and degradability				
	No data is available on the product itself.				
	Solutions with low pH-value must be ne	autralized before discharge.			
2.3	Bioaccumulative potential	accumulative potential			
	n.av.				
2.4	Mobility in soil				
o =	n.av.				
2.5	Results of PBT and vPvB assessme				
	This mixture contains no substances w	hich are assessed to be PBT or vPvB.			
2.6	Other adverse effects				
2.6.1	COD-Value, mg/g:	n.av.			
2.6.2	BOD5-Value, mg/g:	n.av.			
2.6.3	AOX-Remarks:	Not applicable.			
2.6.4	Significant Components:	Sulphamidic acid			
2.6.5	Other adverse effects:	Not applicable.			
SECTIO	ON 13: Disposal considerations				
3.1	Waste treatment methods				
3.1.1	Recommendation: D 10 / R 4	Waste - Code - No.: 20 01 29			
		The Waste code should be assigned in discussion			
		between the user, the producer and the waste			
		disposal company.			
	In addition comply with the regional au				
212					
3.1.2	Contaminated Packaging	alaanan Othamuiaa aa daaanihad			
		cleaner. Otherwise as described under Residues.			
	Safe Handling: As described unde	r Residues.			

Page 6 of 6

Comp	e Name: ceragol Ultra® Premium Entkalker 6 Additive bany / Supplier: ceragol international GmbH, Grundstrasse 41, CH- 8196 Wil hone: +41 (0)44 879 16 31, Date of issue: 14.06.2018 Replaces Data Sheet of:	: 20.07.2017
SECT	ION 14: Transport information	
*	ADR IMDG Not a dangerous substance as defined in the above regulations. <sup>2)</sup> The information is based on our own tests.	ΙΑΤΑ
14.1	UN number	
14.2	UN proper shipping name	
14.3	Transport hazard class(es)	
14.4	Packing group	
14.5	Environmental hazards	
14.6	Special precautions for user	
14.0	Transport category: Classification Code: Hazard - No.: LQ:	Packing Instructions (Passenger) Packing Instructions (Cargo)
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Co	
SECT	ION 15: Regulatory information	
15.1	Safety, health and environmental regulations/legislation specific for the	substance or mixture
15.2	n.av. <b>Chemical safety assessment :</b> n.ap.	
SECT	ION 16: Other information	
H302: H H314: ( H315: ( H319: ( H400: \	<b>f H phases mentioned in Section 3</b> Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.	
	<b>iture:</b> Jy No. 14102705G850 Laus GmbH, Kirrweiler, Germany programm Nr. 10, InnoCent International GmbH, Eimeldingen, Germany	
The sta accurat product Prepare	atasheet has been compiled in accordance with EU regulation 2015/830. atements in this Material Safety Data Sheet were made to the best of our knowl te as possible. They are given for information only. They do not constitute a cor t's properties. They must neither be altered nor transferred to other products. ed by: CoSiChem AG, Ernst-Lemmer-Straße 23, D - 35041 Marburg, info@cos of of Data: 20.05.2015, \$ctg_0005	ntractual guarantee of a