according 1907/2006/EC Date of revision: 12.02.2016 Vo **Ultrasonic dental plaque cleaner** 

Version: 01

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

1.1	1 Product identifier			
1.1				
4.0	Tradename:		Ultrasonic dental plaque cleaner	
1.2 Relevant identified uses of the substance or				
	Relevant identified use		Ultrasonic dental plaque cleaner	
Uses advised against:			None known.	
1.3 Details of the supplier of the safety data sheet				
	Manufacturer/Supplier		ERNST HINRICHS Dental GmbH	
	Street / mailbox:		Borsigstr. 1	
	Country code. / postal	code / city:	D - 38644 Goslar	
	Phone:		0 53 21 / 5 06 24	
	Fax:		0 53 21 / 5 08 81	
	E-mail / Website:		info@hinrichs-dental.de / www.hinrichs-dental.de	
	Further information ob	tainable from:	ERNST HINRICHS Dental GmbH	
1.4	Emergency telephone	number		
	ERNST HINRICHS De		+49 (0) 53 21 / 5 06 24 - 25 (Mon-Fri. 8 a.m. – 4 p.m.)	
SEC	TION 2: Hazards ident	ification		
2.1	Classification of the su	ubstance or mixture:	Skin Corr. 1B: H314 Causes severe skin burns and eye	
			damage.	
			Eye Dam. 1: H318 Causes serious eye damage.	
			Met. Corr. 1: H290 May be corrosive to metals.	
2.2	Label elements			
	Hazard pictograms:		$\wedge$	
			E E	
	Signal word:		Danger	
	Contains:		Phosphoric acid	
	Hazard statements:			
	H314	Courses sovere skin	burns and eye damage.	
	H290			
		May be corrosive to		
	Precautionary stateme		N/	
	P260	Do not breathe spra		
	P280		ves / protective clothing / eye protection / face protection.	
	P305+P351+P338		cautiously with water for several minutes. Remove contact	
	B000 B00 - 5		nd easy to do. Continue rinsing.	
	P303+P361+P353		ly all contaminated clothing. Rinse skin with water / shower.	
	P301+P330+P331		inse mouth. Do NOT induce vomiting.	
	P310		POISON CENTER / doctor.	
	P390		prevent material damage.	
	P501		s / container to in accordance with local / regional / national /	
		international regulat		
	Cleaner, 648/2004/CE	, contains:	< 5% non-ionic surfactants	
2.3	Other hazards			
	Environmental hazard	s:	Does not contain any PBT or vPvB substances.	
	Other hazards:		Further hazards were not determined with the current level	
			of knowledge.	

# SECTION 3: Composition/information on ingredients

Product-type:	: The product is a mixture.	
Range [%]	Substance	
30 - 40	Phosphoric acid	
	CAS: 7664-38-2, EINECS/ELINCS: 231-633-2, EU-INDEX: 015-011-00-6, Reg-No.: 01-	
	2119485924-24-XXXX	
	GHS/CLP: Skin Corr. 1B: H314 - Met. Corr. 1: H290	





according 1907/2006/EC Date of revision: 12.02.2016 Version: 01 Printing date: 01.04.2016 Ultrasonic dental plaque cleaner Substances of Very High Concern - SVHC: substances are Comment on component parts: not contained or are below 0.1%. For full text of Hstatements: see SECTION 16. **SECTION 4: First aid measures** 4.1 Description of first aid measures General information: Take off contaminated clothing and wash before reuse. After inhalation: Remove the victim into fresh air and keep him calm. In the event of symptoms seek medical treatment. After skin contact: In case of contact with skin wash off immediately with soap and water. Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds. Rinse cautiously with water for several minutes. Remove After eye contact: contact lenses, if present and easy to do. Continue rinsing. Consult a doctor immediately. After swallowing: Consult a doctor immediately. Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Product is caustic. 4.2 Most important symptoms and effects, both acute and delayed: 4.3 Indication of any immediate medical Treat symptomatically. attention and special treatment needed: If swallowed or in the event of vomiting, risk of product entering the lungs. **SECTION 5: Firefighting measures** Extinguishing media 5.1 Suitable extinguishing agents: Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered. For safety reasons unsuitable Full water jet. extinguishing agents: 5.2 Special hazards arising from the Risk of formation of toxic pyrolysis products. substance or mixture: 5.3 Advice for firefighters Use self-contained breathing apparatus. Wear full protective suit. Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations. **SECTION 6: Accidental release measures** Personal precautions, protective Ensure adequate ventilation. 6.1 High risk of slipping due to leakage/spillage of product. equipment and emergency procedures: Use personal protective equipment (protective gloves, safety glasses, protective clothing). 6.2 Environmental precautions: Do not discharge into the drains/surface waters/groundwater. Prevent spread over a wide area (e.g. by containment or oil barriers). Methods and material for containment and Pick up with absorbent material (e.g. sand, sawdust, 6.3 universal absorbent, diatomaceous earth). cleaning up: Dispose of absorbed material in accordance within the regulations. 6.4 Reference to other sections: See SECTION 8+13 **SECTION 7: Handling and storage** Precautions for safe handling 7.1 Information about protection against Use only in well-ventilated areas. The normal safety explosions and fires: precautions for handling chemicals must be observed. Do

precautions for handling chemicals must be observed. Do not eat, drink, smoke or take drugs at work. Use barrier skin cream. Wash hands before breaks and after work. Take off contaminated clothing and wash before reuse.

according 1907/2006/EC Date of revision: 12.02.2016 V Ultrasonic dental plaque cleaner

Version: 01

7.2 Conditions for safe storage, including any incompatibilities
7.2 Conditions for safe storage, including any incompatibilities
7.3 Specific end use(s)
7.2 Conditions for safe storage, including any incompatibilities
Keep only in original container.
Prevent penetration into the ground.
Do not store together with food and animal food/diet.
Do not store with alkalies.
Keep container tightly closed.
Keep away from frost.
Protect from heat/overheating.
See product use, SECTION 1.2

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

## Ingredients with occupational exposure limits to be monitored (GB)

 Substance

 Phosphoric acid

 CAS: 7664-38-2, EINECS/ELINCS: 231-633-2, EU-INDEX: 015-011-00-6, Reg-No.: 01-2119485924-24-XXXX

 Long-term exposure: 1 mg/m³

 Short-term exposure (15-minute): 2 mg/m³

#### Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES Phosphoric acid CAS: 7664-38-2, EINECS/ELINCS: 231-633-2, EU-INDEX: 015-011-00-6, Reg-No.: 01-2119485924-24-XXXX Eight hours: 1 mg/m<sup>3</sup> Short-term (15-minute): 2 mg/m<sup>3</sup>

#### DNEL

Substance
Phosphoric acid, CAS: 7664-38-2
Industrial, inhalative, Long-term - local effects: 2,92 mg/m <sup>3</sup> .
general population, inhalative, Long-term - local effects: 0,73 mg/m <sup>3</sup> .

#### PNEC

Substance
Phosphoric acid, CAS: 7664-38-2
There are no PNEC values established for the substance.

8.2 Exposure controls:

~		
	Additional advice on system design:	Ensure adequate ventilation on workstation.
	Eye protection:	Tightly fitting goggles. ( (EN 166:2001).
	Hand protection:	0,7 mm butyl rubber, > 480 min (EN 374-1/-2/-3). The
		details concerned are recommendations. Please contact the
		glove supplier for further information.
	Skin protection:	Protective clothing.
	Other:	Avoid contact with eyes and skin.
		Personal protective equipment should be selected
		specifically for the working place, depending on
		concentration and quantity handled. The resistance of this
		equipment to chemicals should be ascertained with the
		respective supplier. Do not inhale aerosols.
	Respiratory protection:	Breathing apparatus in the event of aerosol or mist
	Respiratory protection.	
		formation. Short term: filter apparatus, filter P3. (DIN EN
		143)

Page 3 of 8 Printing date: 01.04.2016

## according 1907/2006/EC Date of revision: 12.02.2016 Ve **Ultrasonic dental plaque cleaner**

Version: 01

Thermal hazards:None.Delimitation and monitoring of the<br/>environmental exposition:Protect the environment by applying appropriate control<br/>measures to prevent or limit emissions.

## **SECTION 9: Physical and chemical properties**

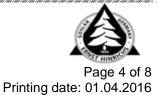
SECTION 9: Physical and chemical properties			
9.1	Information on basic physical and chemical properties		
	General Information		
	Form:	Liquid.	
	Colour:	Reddish.	
	Odour:	Characteristic.	
	Odour threshold:	Not applicable.	
	pH:	1,5 - 2,5	
	pH-value [1%]	Not determined.	
	Boiling point [°C]:	Not determined.	
	Flash point [°C]:	Not applicable.	
	Flammability (solid, gas) [°C]:	Not applicable.	
	Auto-ignition temperature:	Not applicable.	
	Lower explosion limit:	Not applicable.	
	Upper explosion limit:	Not applicable.	
	Oxidising properties:	No.	
	Vapour pressure/gas pressure [kPa]:	Not determined.	
	Density [g/ml]:	1,20 - 1,22 (20 °C / 68,0 °F)	
	Bulk density [kg/m <sup>3</sup> ]:	Not applicable.	
	Solubility in water:	Completely miscible.	
	Partition coefficient [n-octanol/water]:	Not determined.	
	Viscosity:	Not applicable.	
	Relative vapour density determined in air:	Not applicable.	
	Evaporation speed:	Not applicable.	
	Melting point [°C]:	Not determined.	
	Autoignition temperature [°C]:	Not self-igniting.	
	Decomposition temperature [°C]:	Not determined.	
9.2	Other information:	None.	
050			
-	TION 10: Stability and reactivity		
	Reactivity	See SECTION 10.3.	
	Chemical stability	The product is stable under standard conditions.	
10.3	Possibility of hazardous reactions	Reactions with alkalis (lyes).	
10.4	Conditions to sweid	Reactions with light metals, with evolution of hydrogen.	
	Conditions to avoid	See SECTION 7.2.	
	Incompatible materials	Alkalis	
10.6	Hazardous decomposition products	No hazardous decomposition products known.	

# SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
Product
ATE-mix, inhalative, > 20 mg/L 4h.
ATE-mix, dermal, > 2000 mg/kg.
ATE-mix, oral, > 2000 mg/kg.

Substance	
Phosphoric acid, CAS: 7664-38-2	
LD50, dermal, Rabbit: 2740 mg/kg (Lit.).	
LD50, oral, Rat: 1530 mg/kg (Lit.).	
LC50, inhalative, Rat: > 0,85 mg/l (1h) (Lit.).	



## according 1907/2006/EC Date of revision: 12.02.2016 V Ultrasonic dental plaque cleaner

Version: 01

Serious eye damage/irritation:	Based on the available information, the classification criteria are fulfilled.
	Toxicological data of complete product are not available.
	Risk of serious damage to eyes.
	Calculation method
Skin corrosion/irritation:	Based on the available information, the classification criteria are not fulfilled. Toxicological data of complete product are not available.
	Product is caustic.
	Calculation method.
Respiratory or skin sensitisation:	Does not contain a relevant substance that meets the
, ,	classification criteria. Based on the available information, the
	classification criteria are not fulfilled. Toxicological data of
	complete product are not available.
Specific target organ toxicity (single	Does not contain a relevant substance that meets the
exposure):	classification criteria. Based on the available information, the
	classification criteria are not fulfilled. Toxicological data of
Specific target argen toxicity (repeated	complete product are not available. Does not contain a relevant substance that meets the
Specific target organ toxicity (repeated exposure):	classification criteria. Based on the available information, the
exposure).	classification criteria are not fulfilled. Toxicological data of
	complete product are not available.
Mutagenicity:	Does not contain a relevant substance that meets the
	classification criteria. Based on the available information, the
	classification criteria are not fulfilled. Toxicological data of
	complete product are not available.
Reproduction toxicity:	Does not contain a relevant substance that meets the
	classification criteria. Based on the available information, the
	classification criteria are not fulfilled. Toxicological data of complete product are not available.
Carcinogenicity:	Does not contain a relevant substance that meets the
Carolino gomoly.	classification criteria. Based on the available information, the
	classification criteria are not fulfilled. Toxicological data of
	complete product are not available.
Aspiration hazard:	Does not contain a relevant substance that meets the
	classification criteria. Based on the available information, the
General remarks:	classification criteria are not fulfilled.
General remarks.	None.

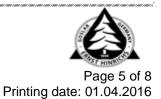
## **SECTION 12: Ecological information**

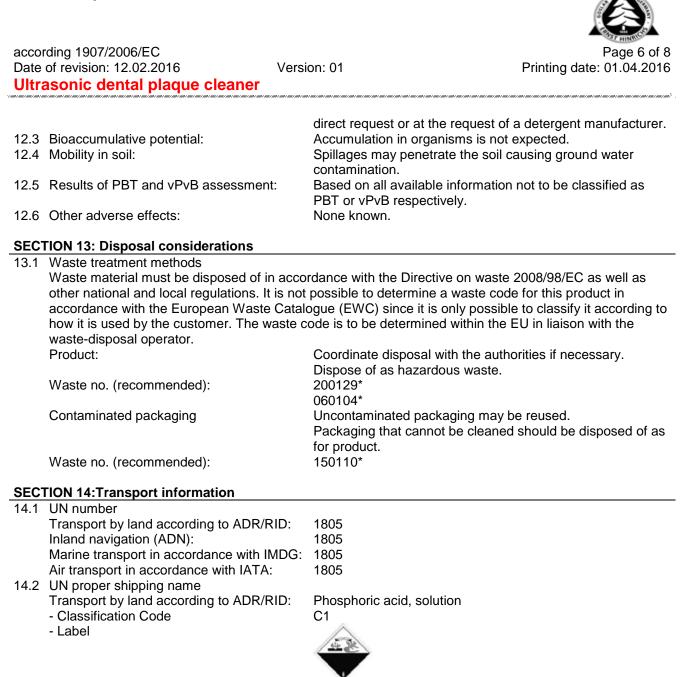
12.1	Toxicity	
	Substance	
	Phosphoric acid, CAS: 7664-38-2	
	LC50, (96h), fish: 3-3,5 mg/l (Lit.).	
	LC0, fish: 100-1000 mg/l (Lit.).	

Not determined.

12.2 Persistence and degradability: Behaviour in environment compartments: Behaviour in sewage plant: Biological degradability:

Not determined. Not determined. 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





- ADR LQ

- ADR 1.1.3.6 (8.6)
- Inland navigation (ADN):
- Classification Code
- Label

Marine transport in accordance with IMDG:

- EMS
- Label

(III)

- IMDG LQ

Air transport in accordance with IATA:

A CONTRACTOR

Transport category (tunnel restriction code) 3 (E)



Phosphoric acid, solution

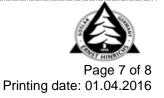


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Version: 01



- Label



	V
Transport hazard class(es)	
Transport by land according to ADR/RID:	8
Inland navigation (ADN):	8
Marine transport in accordance with IMDG:	8
Air transport in accordance with IATA:	8
Packing group	
Transport by land according to ADR/RID:	III
Inland navigation (ADN):	III
Marine transport in accordance with IMDG:	III
Air transport in accordance with IATA:	III
Environmental hazards	
Transport by land according to ADR/RID:	No
Inland navigation (ADN):	No
Marine transport in accordance with IMDG:	No
Air transport in accordance with IATA:	No
Special precautions for user:	Relevant information under SECTION 6 to 8.
Transport in bulk according to Annex II of	Not determined.
Marpol and the IBC Code	
	Inland navigation (ADN): Marine transport in accordance with IMDG: Air transport in accordance with IATA: Packing group Transport by land according to ADR/RID: Inland navigation (ADN): Marine transport in accordance with IMDG: Air transport in accordance with IATA: Environmental hazards Transport by land according to ADR/RID: Inland navigation (ADN): Marine transport in accordance with IMDG: Air transport in accordance with IATA: Special precautions for user: Transport in bulk according to Annex II of

#### **SECTION 15: Regulatory information**

	<b>č</b> <i>i</i>		
15.1	15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture		
	EEC-REGULATIONS:	1991/689 (2001/118); 1999/13; 2004/42; 648/2004;	
		1907/2006 (REACH); 1272/2008; 75/324/EEC	
		(2008/47/EC); 453/2010/EC; (EU) 2015/830	
	TRANSPORT-REGULATIONS:	DOT-Classification, ADR (2015); IMDG-Code (2015, 37.	
		Amdt.); IATA-DGR (2016).	
	NATIONAL REGULATIONS (GB)::	EH40/2005 Workplace exposure limits (Second edition,	
		published December 2011). CHIP 3/ CHIP 4	
	Observe employment restrictions for	Observe employment restrictions for mothers-to-be and	
	people:	nursing mothers. Observe employment restrictions for young	
		people.	
	VOC (1999/13/CE)	0 %	
15.2	Chemical safety assessment:	Not applicable:	

## **SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

# 16.1 Hazard statements

(SECTION 03):	
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

#### 16.2 Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement concernant le transport international ferroviaire de marchandises
	dangereuses
ADN:	Accord européen relatif au transport international des marchandises dangereuses

Page 8 of 8 Printing date: 01.04.2016

according 1907/2006/EC Date of revision: 12.02.2016 Ultrasonic dental plaque cleaner

Version: 01

	CAS: CLP: DMEL: DNEL: EC50: ECB: EEC: EINECS: ELINCS: GHS: IATA: IBC-Code: IC50: IMDG: IUCLID: LC50: LD50: MARPOL: PBT: PNEC: REACH: TLV®STEL: VOC: VPVB:	par voie de navigation intérieure Chemical Abstracts Service (division of the American Chemical Society) Classification, Labelling and Packaging Derived Minimum Effect Level Derived No-Effect Level (REACH) Median effective concentration = European Chemicals Bureau European Economic Community European Inventory of Existing Commercial Chemical Substances European Inventory of Existing Commercial Chemical Substances European List of Notified Chemical Substances Globally Harmonised System of Classification and Labelling of Chemicals International Air Transport Association International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk Inhibition concentration, 50% International Maritime Code for Dangerous Goods International Uniform ChemicaL Information Database Lethal concentration, 50 percent Lethal dose, 50 percent International Convention for the Prevention of Marine Pollution from Ships Persistent, Bioaccumulative and Toxic substance Predicted No-Effect Concentration (REACH) Registration, Evaluation, Authorisation and Restriction of Chemicals Threshold limit value – time-weighted average Threshold limit value – short-time exposure limit Volatile Organic Compounds very Persistent and very Bioaccumulative.
16.2	VPvB: Other information:	very Persistent and very Bioaccumulative.
10.3	Classification procedur	<ul> <li>Skin Corr. 1B: H314 Causes severe skin burns and eye damage. (Calculation method)</li> <li>Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)</li> <li>Met. Corr. 1: H290 May be corrosive to metals. (Calculation method)</li> <li>None.</li> </ul>