SAFETY DATA SHEETS

This SDS packet was issued with item:

077121007

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

077121023

Material Safety Data Sheet U.S. Department of Labor May be used to comply with OSHA's Hazard Occupational Safety and Health Administration Communication Standard, 29 CFR 1910 1200. Standard (Non-Mandatory Form) must be consulted for specific requirements. Form Approved OMB No. 1218-0072 IDENTITY (as Used on Label and List) Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space Vococid must be marked to indicate that. Section I VOCO GmbH +49-4721-719-0 Manufacturer's name Emergency Telephone Number: Address (Number, Street, City, State and ZIP Code) Telephone Number for Information: +49-4721-719-09/24/2007 Date Prepared: Anton-Flettner-Str. 1-3 Signature of Preparer (optional) 27472 Cuxhaven, Germany Section II—Hazardous Ingredients/Identity Information Hazardous Components (Specific Chemical Identity, Other Limits OSHA PEL Common Name(s)) **ACGIH** Recommended % (optional) **TLV** phosphoric acid Section III--Physical/Chemical Characteristics Specific Gravity $(H_20 = 1)$ **Boiling Point** not applicable not applicable Vapor Pressure (mm Hg) Melting Point not applicable not applicable Vapor Density (AIR = 1) Evaporation Rate (Butyl Acetate = 1) > 1 nearly insoluble Solubility in Water appearance: gel or liquid odor:: slightly specific Appearance and Odor Section IV—Fire and Explosion Hazard Data Flash Point (Method Used) not applicable Flammable Limits LEL n. a. UEL n.a. Carbon dioxide, foam, dry fire extinguishers Extinguishing Media not applicable Special Fire Fighting Procedures: not applicable Unusual Fire and Explosion Hazards: (Reproduce locally) OSHA 174 Sept. 1985

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Section V	—Reactivity Data	ı			
Stability		Unstable		Conditions to Avoid	
		Stable	X	heat, exposition	to sunlight
Incompatibility	(Materials to Avoid) metal p	powders, strong oxidizers			
Hazardous Dec	omposition or Byproducts	position or Byproducts carbon monoxide (decomposition)			
Hazardou Polymeriz		May Occur	X	Conditions to Avoid	
		Will Not Occur		metal powders, stro	ng oxidizers
Section V	I—Health Hazard	Data		.	
Route(s) of Entry		Inhalation? negligible	Skin? irritatir	g	Ingestion? damaging to one`s health
Health Hazards	(Acute and Chronic) allergic	reactions towards ingredients are po	ossible (sensitized pers	ons), in case of eye and skin co	ontact: irritating
Carcinogenicity	v not given	NTP? not given	IARC	Monographs? not given	OSHA Regulated? not applicable
	, not given	Title instigrent		not given	
Medical Cor Generally A		Allergies towards ingredient	s of the materials		
Emergency a	and First Aid Procedures	: in case of allergies by skin	contact: wash with	soap and water, remote of	contaminated clothing.
		in case of eye contact: rinse	thoroughly with p	lenty of water, if necessar	ry contact a ophthalmologist
		or Safe Handling and	Use		
	cen in Case Material Is Release				
Pick up sma	ll spills with paper towel	ls and discard properly			
	D:	1' '' '''		1.0	
-		al in compliance with local, s			
Precautions to l	Be Taken in Handling and Sto	ring: Protect from bright light	t and heat, keep av	ay from children and foo	dstuff
Other Precaution	ons: Avoid pollution of w	ater and sewage systems			
Section V	TII—Control Mea	sures			
		ecessary if used in the recomm	mended way		
Ventilation	Local Exhaust	no data given		Special no d	ata given
	Mechanical (General)	no data given		Other no d	lata given
Protective Glov	ves recommended		Evo De	otection recommended	-
	e Clothing or Equipment den	tal working clothes	Lye Fi	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			and dele		
Work/Hygienic	Practices: Follow the instr	ructions for use, avoid prolor	iged skin contact		

The data given here are based on current knowledge and experience. They do not signify any warranty with regard to the properties of the product.

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1 Identification

- · Product identifier
- · Trade name: Vococid
- · Application of the substance / the mixture Discharging agent
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

VOCO GmbH

Anton-Flettner-Str. 1-3 D-27472 Cuxhaven

- · Information department: Scientific department tel. +49 (0)4721-719-0
- · Emergency telephone number: Scientific department tel. +49 (0)4721-719-0

2 Hazard(s) identification

Health effects are based on the unmixed/uncured material.

Under FDA regulations this product is classified as a medical device.

Medical devices are exempt from the labelling provisions of GHS according to the Hazard Communication Standard (HCS).

· Classification of the substance or mixture



Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements
- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Wear protective gloves / eye protection.

Wear protective clothing.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Other hazards Use only for intended scope of application
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

7664-38-2 phosphoric acid

Skin Corr. 1B, H314

25-50%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

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- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- · Environmental precautions:

Do not allow to enter sewers/surface or ground water.

Dilute with plenty of water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling For dental use only.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: See storage instructions on package
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists that were valid during the creation were used as basis.

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Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required. Protection of hands:



Protective gloves

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Safety glasses

9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

· Appearance:

Light blue Odorless gelColor: Form: · Odor:

0.8 · pH-value at 20 °C (68 °F):

· Odor threshold:

Not determined.

Undetermined. Melting point/Melting range: · Change in condition

Undetermined.

Boiling point/Boiling range:

Not applicable. Not applicable. · Flammability (solid, gaseous): · Flash point:

Not determined. · Decomposition temperature: Product is not selfigniting. · Auto igniting:

Product does not present an explosion hazard. 1.28 g/cm³ (10.682 lbs/gal) . Density at 20 °C (68 °F): · Danger of explosion:

Not determined. · Relative density

Not determined. Not determined. · Evaporation rate · Vapor density

Solubility in / Miscibility with

Water:

· Partition coefficient (n-octanol/water): Not determined.

Fully miscible.

Dynamic: · Viscosity.

Kinematic:

Not determined. Not determined.

No further relevant information available. · Other information

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10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Water hazard class 1 (Self-assessment): slightly hazardous for water

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number			
DOT, ADR, IMDG, IATA	UN1805		
UN proper shipping name	-		
DOT	Phosphoric acid solution		
ADR	1805 Phosphoric acid solution		
IMDG, IATA	PHOSPHORIC ACID, SOLUTION		
Transport hazard class(es)	-		
DOT			
On Participation of the Control of t			
Class	8 Corrosive substances		
Label	8		
ADR, IMDG, IATA			
Class	8 Corrosive substances		
Label	8		
Packing group	-		
DOT, ADR, IMDG, IATA	III		
Environmental hazards:			
Marine pollutant:	No		
Special precautions for user	Warning: Corrosive substances		
Danger code (Kemler):	80		
EMS Number:	F- A , S - B		
Segregation groups	Acids		
Stowage Category	A		
Transport in bulk according to Ann	ex II of		
MARPOL73/78 and the IBC Code	Not applicable.		

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

7664-38-2 phosphoric acid

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients are listed

· TLV (Threshold Limit Value established by ACGIH)

Contact VOCO for more information.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Wear protective gloves / eye protection.

Wear protective clothing.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

The information contained herein is based on our present knowledge and is believed to be correct at the date issued. The information is subject to change without notice. However, all information, statements, recommendations or suggestions shall not constitute any guarantee, representation or warranty, expressed or implied.

Final determination whether the product is fit and suitable for a particular purpose and the user's method of use or application is the sole responsibility of the user.

- · Department issuing SDS: Scientific department
- · Contact: Tel.: +49 (0)4721-719-0
- · Date of preparation / last revision 02/23/2017 / 14

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· 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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

NIOSH: National Institute for Occupati OSHA: Occupational Safety & Health TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1

* Data compared to the previous version altered.

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