

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

077121023

**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).**

077121007

**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

IDENTITY (as Used on Label and List)  
**Vococid**

*Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.*

**Section I**

Manufacturer's name VOCO GmbH	Emergency Telephone Number: +49-4721-719-0
Address (Number, Street, City, State and ZIP Code)	Telephone Number for Information: +49-4721-719-0
Anton-Flettner-Str. 1-3	Date Prepared: 9/24/2007
27472 Cuxhaven, Germany	Signature of Preparer (optional)

**Section II—Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
phosphoric acid				

**Section III—Physical/Chemical Characteristics**

Boiling Point	not applicable	Specific Gravity (H <sub>2</sub> O = 1)	not applicable
Vapor Pressure (mm Hg)	not applicable	Melting Point	not applicable
Vapor Density (AIR = 1)	1	Evaporation Rate (Butyl Acetate = 1)	> 1
Solubility in Water	nearly insoluble		
Appearance and Odor	appearance: gel or liquid	odor::	slightly specific

**Section IV—Fire and Explosion Hazard Data**

Flash Point (Method Used)	not applicable	Flammable Limits	n. a.	LEL	n. a.	UEL	n. a.
Extinguishing Media	Carbon dioxide, foam, dry fire extinguishers						
Special Fire Fighting Procedures:	not applicable						
Unusual Fire and Explosion Hazards:	not applicable						

(Reproduce locally)

OSHA 174 Sept. 1985

**VC 69001063 US 097**

**Section V—Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	heat, exposition to sunlight

Incompatibility (*Materials to Avoid*) metal powders, strong oxidizers

Hazardous Decomposition or Byproducts carbon monoxide (decomposition)

Hazardous Polymerization	May Occur	X	Conditions to Avoid
	Will Not Occur		metal powders, strong oxidizers

**Section VI—Health Hazard Data**

Route(s) of Entry	Inhalation? negligible	Skin? irritating	Ingestion? damaging to one's health
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Health Hazards (*Acute and Chronic*) allergic reactions towards ingredients are possible (sensitized persons), in case of eye and skin contact: irritating

Carcinogenicity not given      NTP? not given      IARC Monographs? not given      OSHA Regulated? not applicable

Signs and Symptoms of Exposure: in case of allergic reactions typical signs and symptoms of allergies can be observed

Medical Conditions  
Generally Aggravated by Exposure: Allergies towards ingredients of the materials

Emergency and First Aid Procedures: in case of allergies by skin contact: wash with soap and water, remote contaminated clothing.

in case of eye contact: rinse thoroughly with plenty of water, if necessary contact a ophthalmologist

**Section VII—Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material Is Released or Spilled:

Pick up small spills with paper towels and discard properly

Waste Disposal Method Dispose material in compliance with local, state or federal regulations

Precautions to Be Taken in Handling and Storing: Protect from bright light and heat, keep away from children and foodstuff

Other Precautions: Avoid pollution of water and sewage systems

**Section VIII—Control Measures**

Respiratory Protection (*Specify Type*) not necessary if used in the recommended way

Ventilation	Local Exhaust	no data given	Special	no data given
	Mechanical ( <i>General</i> )	no data given	Other	no data given

Protective Gloves recommended      Eye Protection recommended

Other Protective Clothing or Equipment dental working clothes


Work/Hygienic Practices: Follow the instructions for use, avoid prolonged 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.** **VC 69001063 US 097**

## 1 Identification

- **Product identifier**
- **Trade name: Vocacid**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **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

- **Classification of the substance or mixture**  
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
- **Information concerning particular hazards for human and environment:**  
The product has to be labeled due to the calculation procedure of international guidelines.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
The product has been classified and marked in accordance with directives on hazardous materials.  
As a medical device the product is not subject to labelling regulations under directive 1272/2008/EC.
- **Hazard-determining components of labeling:**  
phosphoric acid
- **Risk phrases:**  
Causes burns.
- **Safety phrases:**  
When using do not eat or drink.  
Do not breathe spray.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Wear suitable protective clothing, gloves and eyeface protection.  
In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible).  
This material and its container must be disposed of as hazardous waste.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**  

  - Health = 3
  - Fire = 0
  - Reactivity = 0
- **HMS-ratings (scale 0 - 4)**  

HEALTH	3
FIRE	0
REACTIVITY	0

  - Health = 3
  - Fire = 0
  - Reactivity = 0
- **Other hazards** Use only for intended scope of application
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 2)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Vococid

(Contd. of page 1)

### 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	C R34	25-50%
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### 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.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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:** 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

- **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.

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Reviewed on 08/27/2014

Trade name: **Votocid**

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**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:*

**poly(ethylene glycol) (≤2.5%)**

**WEEL** Long-term value: 10 mg/m<sup>3</sup>  
{H}; MW>200

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

• *Exposure controls*

• *Personal protective equipment:*

• *General protective and hygienic measures:*

*Immediately remove all soiled and contaminated clothing.*

*Wash hands before breaks and at the end of work.*

*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.*

• *Penetration time of glove material*

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

• *Eye protection: Safety glasses*

**9 Physical and chemical properties**

• *Information on basic physical and chemical properties*

• *General Information*

• *Appearance:*

*Form: gel*

*Color: Light blue*

• *Odor: Odorless*

• *Odour threshold: Not determined.*

• *pH-value at 20 °C (68 °F): 0.8*

• *Change in condition*

*Melting point/Melting range: Undetermined.*

*Boiling point/Boiling range: Undetermined.*

• *Flash point: Not applicable.*

• *Flammability (solid, gaseous): Not applicable.*

• *Decomposition temperature: Not determined.*

• *Auto igniting: Product is not selfigniting.*

• *Danger of explosion: Product does not present an explosion hazard.*

• *Density at 20 °C (68 °F): 1.28 g/cm<sup>3</sup> (10.682 lb/gal)*

• *Relative density: Not determined.*

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Trade name: Vococid

		(Contd. of page 3)
• Vapour density	Not determined.	
• Evaporation rate	Not determined.	
• Solubility in / Miscibility with Water:	Fully miscible.	
• Partition coefficient (n-octanol/water):	Not determined.	
• Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
• Other information	No further relevant information available.	

### 10 Stability and reactivity

- **Reactivity**
- **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**

• <b>IARC (International Agency for Research on Cancer)</b>	
7631-86-9   silicon dioxide, chemically prepared	3

• <b>NTP (National Toxicology Program)</b>	
None of the ingredients is listed.	

• <b>OSHA-Ca (Occupational Safety &amp; Health Administration)</b>	
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.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.

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USA



**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Vocacid

- |   |                    |
|---|--------------------|
| <ul style="list-style-type: none"> <li>- Additional ecological information:</li> <li>- General notes:<br/>Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.<br/>Must not reach bodies of water or drainage ditch undiluted or unneutralized.</li> <li>- Results of PBT and vPvB assessment</li> <li>- PBT: Not applicable.</li> <li>- vPvB: Not applicable.</li> <li>- Other adverse effects No further relevant information available.</li> </ul> | (Contd. of page 4) |
|---|--------------------|

**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.

**14 Transport information**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>- UN-Number</li> <li>- DOT, ADR, IMDG, IATA</li> </ul>  | <p align="center">UN1805</p>   |
| <ul style="list-style-type: none"> <li>- UN proper shipping name</li> <li>- DOT</li> <li>- ADR</li> <li>- IMDG, IATA</li> </ul>  | <p align="center">-<br/>Phosphoric acid solution<br/>1805 Phosphoric acid solution<br/>PHOSPHORIC ACID, SOLUTION</p> |
| <ul style="list-style-type: none"> <li>- Transport hazard class(es)</li> <li>- DOT</li> </ul>  | <p align="center">-</p>  |
| <ul style="list-style-type: none"> <li>- Class</li> <li>- Label</li> </ul>   | <p align="center">8 Corrosive substances<br/>8</p>   |
| <ul style="list-style-type: none"> <li>- ADR, IMDG, IATA</li> </ul>  | <p align="center">-</p>  |
| <ul style="list-style-type: none"> <li>- Class</li> <li>- Label</li> </ul>   | <p align="center">8 Corrosive substances<br/>8</p>   |
| <ul style="list-style-type: none"> <li>- Packing group</li> <li>- DOT, ADR, IMDG, IATA</li> </ul>  | <p align="center">-<br/>III</p>  |
| <ul style="list-style-type: none"> <li>- Environmental hazards:</li> <li>- Marine pollutant:</li> </ul>  | <p align="center">No</p>   |
| <ul style="list-style-type: none"> <li>- Special precautions for user</li> <li>- Danger code (Kemler):</li> <li>- EMS Number:</li> <li>- Segregation groups</li> </ul> | <p align="center">Warning: Corrosive substances<br/>80<br/>F-A.S-B<br/>Acids</p>                                     |
| <ul style="list-style-type: none"> <li>- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</li> </ul>  | <p align="center">Not applicable.</p>  |

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Trade name: Vococid

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Transport/Additional information:

ADR

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

IMDG

Limited quantities (LQ)

Excepted quantities (EQ)

5L

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":

UN1805, Phosphoric acid solution, 8, III

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.

Carcinogenicity 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.

Canadian substance listings:

Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

Contact VOCO for more information.

Canadian Ingredient Disclosure list (limit 1%)

7664-38-2 phosphoric acid

7631-86-9 silicon dioxide, chemically prepared

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Printing date 08/27/2014

Reviewed on 08/27/2014

Trade name: Vococid

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• **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.  
As a medical device the product is not subject to labelling regulations under directive 1272/2008/EC.

• **Hazard symbols:**



Corrosive

• **Hazard-determining components of labeling:**  
phosphoric acid

• **Risk phrases:**

Causes burns.

• **Safety phrases:**

When using do not eat or drink.

Do not breathe spray.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible).

This material and its container must be disposed of as hazardous waste.

• **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Department issuing MSDS:** Scientific department

• **Contact:** Tel.: +49 (0)4721-719-0

• **Date of preparation / last revision:** 08/27/2014 / 11

• **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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

USA