

SAFETY DATA SHEETS

This SDS packet was issued with item:

075169412

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).

075169404

Heraeus Kulzer, Inc.
Manufacturer MSDS Number: D008

Patterson Dental Supply Product Code:
189522,74489514,74489506

SECTION 1 : Chemical Product and Company Identification

MSDS Name: VacuKleen E2
Manufacturer Name:Heraeus Kulzer, Inc.
Department: Dental Products Division
Address:
4315 S. Lafayette Blvd.
South Bend, Indiana 46614

Nights: Chemtrec 1-800-424-9300

Business Phone:(219) 291-0661
For information in North America, call: (219) 291-0661
Manufacturer MSDS Revision Date:
June 6, 2000

Supersedes: February 7, 2000

Synonyms:

Not Applicable

Product Codes:

36100 , 36101 , 36102

SECTION 2 : Hazardous Ingredients/Identity Information

Chemical Name

Ethylenediaminetetraacetic Acid CAS#
60-00-4

OSHA PEL TWA: Not Established

ACGIH TLV TWA: Not Established

Chemical Name

Sodium Metasilicate, pentahydrate CAS#
6834-92-0

OSHA PEL TWA: Not Established

ACGIH TLV TWA: Not Established

Chemical Name

Protease CAS#

9014-01-1

OSHA PEL TWA: Not Established

ACGIH TLV TWA: Not Established

ACGIH TLV:

0.06 mg/m3 substilisin
(as pure crystalline enzyme).

SECTION 3 : Physical And Chemical Characteristics

Physical State/Appearance:
Powder
Color:
Light yellow
Odor:
Mild lemon fragrance
Vapor Pressure:
Not Applicable
Vapor Density:
(Air = 1): None
Boiling Point:
Not Applicable
Solubility:
In H2O: Not Applicable
Specific Gravity:
(H2O = 1): Not Applicable
Evaporation Point:
(Ether = 1): Not Applicable

SECTION 4 : Fire And Explosion Hazards

Extinguishing Media:
Water, Carbon Dioxide, Dry Chemical
Fire Fighting Instructions:
None
Unusual Fire Hazards:
None

SECTION 5 : Health Hazards

Applies to All Ingredients:
Route of Exposure:
Eye and skin contact, ingestion and inhalation.
Potential Health Effects:
Eye Contact:
Irritant. Avoid contact with eyes.
Skin Contact:
Irritant. Avoid contact with skin.
Inhalation:
Irritant. Avoid breathing dust or aerosol.
Ingestion:
Harmful if swallowed.

SECTION 6 : Emergency And First Aid Procedures

Eye Contact:
Immediately flush with water. Get immediate medical attention.
Skin Contact:
Flush with water. If irritation persists, get medical attention.
Inhalation:
Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion:

Drink large amounts of water. Do not induce vomiting.

SECTION 7 : Reactivity Data

Chemical Stability:

Stable

Conditions to Avoid:

None known

Incompatibilities with Other Materials:

(Materials to Avoid): None known

Hazardous Polymerization:

Will Not Occur

Conditions to Avoid: None

Hazardous Decomposition Products:

None known.

SECTION 8 : Precautions For Safe Handling

Spill Cleanup Measures:

Sweep up or vacuum material, being careful not to create dust, and transfer to an appropriate chemical waste container. Spill area should be flushed with water.

Storage:

Keep in a cool dry place. Keep out of reach of children.

Waste Disposal:

Dispose of in accordance with local and state regulations.

SECTION 9 : Control Measures

Hand Protection Description:

Protective Gloves: Rubber or vinyl.

Eye/Face Protection:

Safety glasses required.

Protective Clothing/Body Protection:

None required

Respiratory Protection:

Use NIOSH/OSHA approved device if adequate ventilation can't be provided.

SECTION 10 : Other Information

MSDS Revision Date:

June 6, 2000

Supersedes: February 7, 2000

Disclaimer:

We believe that the information contained herein is current as of the

date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Heraeus Kulzer, Inc. it is the user's obligation to determine the conditions of safe use of the product

NE = Not Established
ND = Not Determined
NA = Not Applicable

Form MD.500 (5/92)

Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 08/24/2010

Reviewed on 08/23/2010

1 Identification of substance:

· **Product details:**

· **Trade name: VibraKleen E2**

· **Application of the substance / the preparation** Cleaning material/ Detergent

· **Manufacturer/Supplier:**

Heraeus Kulzer GmbH
Grüner Weg 11, D-63450 Hanau

Tel.: 0800 4372522

· **Information department:**

USA:
Cheryl Zimmerman
Tel. +1 (574) 2996662 / Fax: +1 (574) 2996614
e-mail: cheryl.zimmerman@heraeus.com

· **Emergency information:**

Call "Poisoning Emergency Center Berlin": +49 30 30686 790 (24 hours, support in english and german language)

2 Hazards identification

· **Hazard description:**



Xn Harmful

· **Information pertaining to particular dangers for man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

R 42 May cause sensitization by inhalation.

· **Classification system**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

· **NFPA ratings for USA (scale 0-4)**



Health = 2
Fire = 0
Reactivity = 0

· **HMIS-Ratings (Scale 0-4)**



Health = *2
Fire = 0
Reactivity = 0

3 Composition/Data on components:

· **Chemical characterization**

· **Description:** -

· **Dangerous components:**

	Subtilisin	Xn, Xi; R 37/38-41-42	10-25%
497-19-8	sodium carbonate	Xi; R 36	10-25%

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Trade name: VibraKleen E2

Additional information For the wording of the listed risk phrases refer to section 16. (Contd. of page 1)

4 First aid measures

- **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** Induce vomiting and seek advice of physician.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** No special measures required.
- **Additional information** -

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Dispose contaminated material as waste according to item 13.
- **Additional information:**
No dangerous substances are released.
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
 - **Information for safe handling:**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
 - **Information about protection against explosions and fires:** No special measures required.
- **Storage**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.

8 Exposure controls and personal protection

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

Subtilisin

TLV ()	C 0.00006 mg/m ³
	(m)

25322-68-3 Polyethylenglycol 400

TLV ()	(average molecular weight 200-600)
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Trade name: VibraKleen E2

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

· **Personal protective equipment**

· **General protective and hygienic measures**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

· **Breathing equipment:**

- Filter P1.
- Suitable respiratory protective device recommended.

· **Protection of hands:**

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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.

· **Penetration time of glove material**

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

· **For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:**

- Butyl rubber, BR
- Fluorocarbon rubber (Viton)
- Nitrile rubber, NBR
- Natural rubber, NR
- Chloroprene rubber, CR

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

- PVC or PE gloves

· **Eye protection:** Protective goggles are recommended.

· **Body protection:** Light weight protective clothing

9 Physical and chemical properties:

· **General Information**

- **Form:** Solid.
- **Color:** Whitish
- **Odor:** Nearly odorless

· **Change in condition**

- **Melting point/Melting range:** undetermined
- **Boiling point/Boiling range:** undetermined

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

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

· **Density:** Not determined

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Trade name: VibraKleen E2

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- **Solubility in / Miscibility with**
- **Water:** Soluble

10 Stability and reactivity

- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** none

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Subtilisin

Oral | LD50 | 2000 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through inhalation.

- **Additional toxicological information:**

Harmful
Irritant

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

12 Ecological information:

- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
 - **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Packaging can be reused or recycled after cleaning.
 - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
 - **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
 - **ADR/RID class:** -
- **Maritime transport IMDG:**
 - **IMDG Class:** -

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Trade name: VibraKleen E2

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· **Marine pollutant:** No

· **Air transport ICAO-TI and IATA-DGR:**
· **ICAO/IATA Class:** -

· **Transport/Additional information:** -

15 Regulations

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

· **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

· **Prop 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

· **Carcinogen categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· **Code letter and hazard designation of product:**

Xn Harmful

· **Hazard-determining components of labelling:**

Subtilisin

· **Risk phrases:**

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage to eyes.

42 May cause sensitization by inhalation.

· **Safety phrases:**

22 Do not breathe dust.

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

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

USA

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Material Safety Data Sheet
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Trade name: VibraKleen E2

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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.

· Relevant R-phrases

- 36 Irritating to eyes.
- 37/38 Irritating to respiratory system and skin.
- 41 Risk of serious damage to eyes.
- 42 May cause sensitization by inhalation.

· Department issuing MSDS: Safety department**· Contact:**

Dr. Thiele Tel.: (+49) 6181 35-3012
email: ruediger.thiele@heraeus.com

- * **Data compared to the previous version altered.**

USA