

Material Safety Data Sheet According to 91/155 EEC

Printing date 30.05.2005

Reviewed on 25.05.2005

Hazardous according to criteria of Worksafe Australia

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

· **Informing department:**

Dr. Barbara Bräu
Tel.: +49 2133 51-8521 / Fax: +49 2133 51-5016
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· **Emergency information:** Call +49 30 19240 (24 hours).

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** -

· **Dangerous components:**

	Subtilisin	Xn; R 37/38-41-42	10-25%
CAS: 497-19-8 EINECS: 207-838-8	sodium carbonate	Xi; R 36	10-25%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard designation:**



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 sensitisation by inhalation.

· **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** Initiate vomiting and consult a doctor.

5 Fire fighting measures

· **Suitable extinguishing agents** void

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- **Special hazards caused by the material, its products of combustion or flue gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Dispose of contaminated material as waste according to item 13.
- **Additional information:** No dangerous materials are released.

7 Handling and storage

- **Handling**
 - **Information for safe handling:**
Keep containers 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 containers:** 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 critical values that require monitoring at the workplace:**

Subtilisin

TLV (USA)	C 0.00006 mg/m ³ (m)
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25322-68-3 Polyethylenglycol 400

TLV (USA)	(average molecular weight 200-600)
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
 - **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
 - **Breathing equipment:**
Filter P1.
Breathing protection 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

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- **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 through 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.
- **Colour:** Whitish
- **Smell:** Nearly odourless

· Change in condition

- **Melting point/Melting range:** Not determined
- **Boiling point/Boiling range:** Not determined

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive.

· **Density** Not determined

· Solubility in / Miscibility with

- **Water:** Soluble

10 Stability and reactivity

- **Conditions to be avoided:** No decomposition if used and stored according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of composition:** 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 for skin and mucous membranes.

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- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible by inhalation.

· **Additional toxicological information:**

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

Harmful
Irritant

12 Ecological information:

· **General notes:**

Water hazard class 1 (calculated according to VwVwS): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies 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.

· **European waste catalogue**

18 01 06 chemicals consisting of or containing dangerous substances

· **Uncleaned packagings:**

· **Recommendation:** Packaging can be reused or recycled after cleaning.

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

· **ADR/RID-GGVS/E Class:** -

· **Maritime transport IMDG/GGVSea:**

· **IMDG/GGVSea Class:** -

· **Marine pollutant:** No

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

· **ICAO/IATA Class:** -

15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· **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.

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- 41 Risk of serious damage to eyes.
- 42 May cause sensitisation 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 (show the label where possible).

· **National regulations**

· **Water hazard class:**

Water hazard class 1 (calculated according to VwVwS): slightly hazardous for water.

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 sensitisation by inhalation.

· **Contact:**

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- * Data compared to the previous version altered.

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