

**SAFETY DATA SHEET**

**SECTION 1 : IDENTIFICATION**

Product identifier used on the label:

**Product Name:** **VibraKleen E2**  
**Product Code:** 50037100, 50037100CN, 50037101, 40000259  
**MSDS Manufacturer Number:** D007

Other means of identification:

**Synonyms:** Not applicable

Recommended use of the chemical and restrictions on use:

**Product Use/Restriction:** Ultrasonic cleaner for dental instruments.

Chemical manufacturer address and telephone number:

**Manufacturer Name:** Heraeus Kulzer, LLC (Mitsui Chemicals Group)  
**Address:** 300 Heraeus Way  
South Bend, Indiana 46614-2517  
USA  
**General Phone Number:** 800-431-1785

Emergency phone number:

**Emergency Phone Number:** Chemtrec @ 1-800-424-9300

**SECTION 2 : HAZARD(S) IDENTIFICATION**

Classification of the chemical in accordance with GHS 1910.1200(d)(f):

**GHS Pictograms:**



**Signal Word:** DANGER.

**GHS Class:** Serious Eye Damage. Category 1.  
Skin corrosion. Category 1.

**Hazard Statements:** H318 - Causes serious eye damage.  
H314 - Causes severe skin burns and eye damage.

**Precautionary Statements:** P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P321 - Specific treatment (see ... on this label).  
P363 - Wash contaminated clothing before reuse.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

**Route of Exposure:** Eyes. Skin. Inhalation. Ingestion.

**Potential Health Effects:**

**Eye:** Corrosive. Will cause eye burns and permanent tissue damage.

**Skin:** Severely irritating; may cause permanent skin damage.

**Inhalation:** May cause severe respiratory system irritation.

**Ingestion:** Harmful if swallowed. Corrosive to the gastrointestinal tract.

**Chronic Health Effects:** Prolonged skin contact causes burns.  
Repeated or prolonged inhalation may cause toxic effects.

**Signs/Symptoms:** Depending on solution concentration, material may be corrosive to skin, mucous membranes and eyes. Vapors may cause respiratory irritation.

**Target Organs:** Eyes. Skin. Respiratory system. Digestive system.

**Aggravation of Pre-Existing Conditions:** May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Deterzyme APUG 380	none	25 - 30 by weight	
Soda Ash Dense Grade 260	497-19-8	15 - 20 by weight	
Sodium Bicarbonate 5 Coarse	144-55-8	15 - 20 by weight	
Sorbitol-Sorbogem 834	50-70-4	10 - 15 by weight	
Citric Acid USP Granular Anhydrous	77-92-9	10 - 15 by weight	
Carbowax Polyethylene Glycol 8000	25322-68-3	1 - 5 by weight	
Sodium Benzoate NF/FCC Powder	532-32-1	1 - 5 by weight	

**Notes :** The remaining components of this product are non-hazardous or are in a small enough quantity as to not meet regulatory thresholds for disclosure.

### SECTION 4 : FIRST AID MEASURES

#### Description of necessary measures:

<b>Eye Contact:</b>	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Remove contacts if present and easy to do. Continue rinsing. Get medical attention, if irritation or symptoms of overexposure persists.
<b>Skin Contact:</b>	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
<b>Ingestion:</b>	If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

### SECTION 5 : FIRE FIGHTING MEASURES

#### Suitable and unsuitable extinguishing media:

**Suitable Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material.

#### Special protective equipment and precautions for fire-fighters:

**Protective Equipment:** As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA Ratings:

NFPA Health:	3
NFPA Flammability:	1
NFPA Reactivity:	2

### SECTION 6 : ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures:

**Personnel Precautions:** Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Use proper personal protective equipment as listed in section 8.

#### Environmental precautions:

**Environmental Precautions:** Avoid runoff into storm sewers, ditches, and waterways.

#### Methods and materials for containment and cleaning up:

**Methods for containment:** Contain spills with an inert absorbent material such as soil or sand. Prevent from spreading by covering, diking or other means. Provide ventilation.

**Methods for cleanup:** Clean up spills immediately observing precautions in the protective equipment section. Provide ventilation.

### SECTION 7 : HANDLING and STORAGE

**Precautions for safe handling:**

**Handling:** Corrosive. Use proper personal protective equipment as listed in section 8. Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing. Wash hands thoroughly after handling.

**Hygiene Practices:** Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

**Conditions for safe storage, including any incompatibilities:**

**Storage:** Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use. Keep only in the original, corrosive resistant container and store locked up.

**SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION**

**EXPOSURE GUIDELINES:**

**Guideline ACGIH:** Exposure limits are not established

**Guideline OSHA:** Exposure limits are not established

**Appropriate engineering controls:**

**Engineering Controls:** Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

**Individual protection measures:**

**Eye/Face Protection:** Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

**Skin Protection Description:** Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing.

**Respiratory Protection:** A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

**Other Protective:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**PPE Pictograms:**



**SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES**

**PHYSICAL AND CHEMICAL PROPERTIES:**

- Physical State:** Tablet.
- Color:** White and brown speckled
- Odor:** Mint aroma
- Odor Threshold:** Not determined.
- Boiling Point:** Not determined.
- Melting Point:** Not determined.
- Specific Gravity:** Not determined.
- Solubility:** Readily soluble in water
- Vapor Density:** Not determined.
- Vapor Pressure:** Not determined.
- Percent Volatile:** Not applicable.
- Evaporation Rate:** Not determined.
- pH:** Not determined.
- Viscosity:** Not determined.
- Coefficient of Water/Oil Distribution:** Not determined.
- Flammability:** Not determined.
- Flash Point:** None.
- Lower Flammable/Explosive Limit:** Not applicable.
- Upper Flammable/Explosive Limit:** Not applicable.
- Auto Ignition Temperature:** Not determined.
- Oxidizing Properties:** Not determined.

VOC Content: Not determined.

## SECTION 10 : STABILITY and REACTIVITY

### Chemical Stability:

**Chemical Stability:** Stable under normal temperatures and pressures.

### Possibility of hazardous reactions:

**Hazardous Polymerization:** Will not occur.

### Conditions To Avoid:

**Conditions to Avoid:** Avoid contact with incompatible materials.

### Incompatible Materials:

**Incompatible Materials:** Extremely high temperatures

## SECTION 11 : TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL INFORMATION:

#### Soda Ash Dense Grade 260 :

**Eye:** Administration into the eye - Rabbit Standard Draize test: 100 mg/24H [Moderate]  
Administration into the eye - Rabbit Rinsed with water: 100 mg/30S [Mild]  
Administration into the eye - Rabbit Standard Draize test: 50 mg [Severe] (RTECS)

**Inhalation:** Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 2300 mg/m<sup>3</sup>/2H [Lungs, Thorax, or Respiration-DyspneaGastrointestinal-Other changes] (RTECS)

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 4090 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

#### Sodium Bicarbonate 5 Coarse :

**Eye:** Administration into the eye - Rabbit Standard Draize test: 100 mg/30S [Mild] (RTECS)

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 4220 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

#### Sorbitol-Sorbogem 834 :

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 15900 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

#### Citric Acid USP Granular Anhydrous :

**Eye:** Administration into the eye - Rabbit Standard Draize test: 750 ug/24H [Severe] (RTECS)

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 3 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 11700 mg/kg [Behavioral-AtaxiaCardiac-Change in rateLungs, Thorax, or Respiration-Respiratory depression] (RTECS)

#### Carbowax Polyethylene Glycol 8000 :

**Eye:** Administration into the eye - Rabbit Standard Draize test: 500 mg/24H [Mild]  
Administration into the eye - Rabbit Standard Draize test: 100 uL [Mild]  
Administration into the eye - Rabbit Standard Draize test: 500 mg [Mild] (RTECS)

**Skin:** Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 mL/kg [Details of toxic effects not reported other than lethal dose value]  
Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 28 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 31640 mg/kg [Kidney/Ureter/Bladder-Other changes]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 27500 mg/kg [Kidney/Ureter/Bladder-Other changes]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 22 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 30200 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 600 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 32 gm/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 1054 mg/kg [Details of toxic effects not reported other than lethal dose value]  
Oral - Rat LD50 - Lethal dose, 50 percent kill: 51310 mg/kg [Kidney/Ureter/Bladder-Other changes](RTECS)

#### Sodium Benzoate NF/FCC Powder :

**Ingestion:** Oral - Rat LD50 - Lethal dose, 50 percent kill: 4070 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

## SECTION 12 : ECOLOGICAL INFORMATION

### Ecotoxicity:

**Ecotoxicity:** No ecotoxicity data was found for the product.

**Environmental Fate:**

No environmental information found for this product.

**SECTION 13 : DISPOSAL CONSIDERATIONS**Description of waste:**Waste Disposal:**

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

**SECTION 14 : TRANSPORT INFORMATION**

UN number: Not applicable.

UN proper shipping name: Not Regulated.

Transport hazard class(es): Not applicable.

**Notes :**

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment.

**SECTION 15 : REGULATORY INFORMATION**Safety, health and environmental regulations specific for the product:**Soda Ash Dense Grade 260 :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Sodium Bicarbonate 5 Coarse :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Sorbitol-Sorbozem 834 :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Citric Acid USP Granular Anhydrous :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Carbowax Polyethylene Glycol 8000 :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**Sodium Benzoate NF/FCC Powder :**

TSCA Inventory Status: Listed

Canada DSL: Listed

**SECTION 16 : ADDITIONAL INFORMATION**

HMIS Health Hazard: 3

HMIS Fire Hazard: 1

HMIS Reactivity: 2

HMIS Personal Protection: X

**Other Information:**

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). The customer is responsible for determining the appropriate PPE to be used for the task.

The National Fire Protection Association (NFPA) rating system is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. NFPA hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. NFPA hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. The NFPA system is intended to be interpreted and applied only by properly trained individuals to identify fire, health, and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

NFPA





**HMIS**

Health Hazard	3
Fire Hazard	1
Reactivity	2
Personal Protection	X

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