Material Safety Data Sheet

MSDS No. D008

Date of Review: August 3, 2011

Supersedes MSDS dated: February 8, 2007

SECTION 1 - PRODUCT IDENTIFICATION

Product Name: VacuKleen E²

Product Code: 50036100, 50036101, 50036102

Synonyms: NA

Manufacturer: Heraeus Kulzer, LLC

300 Heraeus Way

South Bend, IN 46614-2517 Phone: 800-431-1785 FAX: 800-522-1545

Hours: 8:00 A.M. - 4:30 P.M.

After Hours: Chemtrec @ 1-800-424-9300

SECTION 2 - CHEMICAL COMPOSITION / HAZARDOUS INGREDIENTS

MATERIALS	CAS#	HAZARD	% WT.	OSHA PEL	ACGIH TLV
Ethylenediaminetetra- acetic Acid	60-00-4		3 - 10	Not Est.	Not Est.
Sodium Metasilicate, pentahydrate	6834-92-0	Irritant	3 - 10	Not Est.	Not Est.
Protease	9014-01-1	Irritant	15 - 25	Not Est.	Not Est. 0.06 mg/m3 substilisins (as pure crystalline enzyme)

SECTION 3 - HAZARDS IDENTIFICATION

*** POTENTIAL HEALTH EFFECTS ***

Target Organs: Eyes, Skin, Respiratory System, Ingestion **Signs and Symptoms of Short-Term (Acute) Exposure:**

Eye: Irritant - Avoid contact with eyes. *Skin:* Irritant - Avoid contact with skin.

Inhalation: Irritant - Avoid breathing dust or aerosol.

Ingestion: Harmful if swallowed.

Effects of Long-Term (Chronic) Exposure: None Known **Medical Conditions Aggravated by Exposure:** None Known

Hygienic Practices: None Known

Carcinogenicity: IARC, NTP, and OSHA do not list VacuKleen E² as a carcinogen.

SECTION 4 - FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Eye Contact: Remove contact lenses. Immediately flush with water. Get immediate medical attention.

Skin Contact: Flush with water. If irritation persists, get medical attention.

Ingestion: Drink large amounts of water. Do not induce vomiting.

SECTION 5 - FIRE-FIGHTING MEASURES

Fire Hazards/Conditions of Flammability: None Known

Flash Point (Method): Not Applicable

Lower Flammable Limit (% by volume): Not Applicable Upper Flammable Limit (% by volume): Not Applicable

Suitable Extinguishing Media: Water, Carbon Dioxide, Dry chemical

Special Fire-Fighting Procedures/Equipment: None Known

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Not Applicable **Environmental Precautions:** Not Applicable

Spill/Leak Procedures: Sweep or vacuum spilled material into a waste container for disposal. Avoid

creating excessive dust. Spill area should be flushed with water.

SECTION 7 - HANDLING AND STORAGE

Handling and Storing Precautions: Keep in a cool dry place. Keep out of reach of children.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation and Engineering Controls: None Known

Respiratory Protection: Use NIOSH-OSHA approved device if adequate ventilation can't be provided.

Protective Gloves: Wear rubber or vinyl gloves to prevent prolonged or repeated skin contact. **Eye Protection:** Wear protective eyeglasses or chemical safety goggles, per OSHA eye and face

protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye

protection must be worn instead of, or in conjunction with contact lenses.

Other Protective Equipment: None Known

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this

material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Form, Color and Odor: Light yellow powder

Odor Threshold: Mild lemon fragrance

pH: Not Applicable

Boiling Point: Not Applicable

Melting/Freezing Point: Not Applicable

Vapor Pressure: Not Applicable Solubility in Water: Not Applicable

Coefficient of Oil/Water Distribution: Not Applicable

Specific Gravity or Relative Density (water =1): Not Applicable

Vapor Density (air =1): Not Applicable

Volatile Organic Compounds (VOC's): Not Applicable

Evaporation Rate: Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

Stability and Reactivity: Stable Conditions to Avoid: None Known Materials to Avoid: None Known

Hazardous Decomposition Products: None Known

Hazardous Polymerization: Will Not Occur

SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of Exposure: No Data Available **Toxicological Data:** No Data Available

Teratogenicity, Mutagenicity, Other Reproductive Effects: No Data Available

Sensitization to Material: No Data Available

SECTION 12 - ECOLOGICAL INFORMATION

General Notes: None Known

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal: Follow applicable Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation of Dangerous Goods (TDG) Information: Not Applicable

Shipping Description:

49 CFR Information: Not Applicable

Shipping Description:

International Dangerous Goods Information: Not Applicable

IMO: ICAO:

Other Information: Not Applicable

SECTION 15 - REGULATORY INFORMATION

WHMIS Information: Not Applicable WHMIS Classification: Not Applicable CEPA Information: Not Applicable

TSCA Information: Components of this product is listed on the TSCA inventory.

SARA Title III: Not Applicable

SECTION 16 - OTHER INFORMATION

Prepared By: Regulatory Department

Additional Notes or References:

ACGIH: American Conference of Governmental Industrial Hygienists

IARC: International Agency for Research on Cancer

NIOSH: National Institute for Occupational Safety and Health **WHMIS:** Workplace Hazardous Materials Information System

Revision: Noted

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.