

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Identification**      Product Name: NuEtch E 3  
Product Number: MCE103      CAS Number: Blend

**Company Identification**

NuGeneration Technologies, LLC      [www.nugentec.com](http://www.nugentec.com)  
100 Professional Center Drive Suite 101  
Rohnert Park, CA 94928 USA  
(707) 820-4080 (For product information)  
1-800-424-9300 or 1-202-483-7616 (CHEMTREC) (For emergencies)

**SPECIAL NOTES:** This product is Biodegradable. This product contains NO Chelates.

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

100.0% NuEtch E 3 - CONTAINING:

**HAZARDOUS AND/OR REGULATED COMPONENTS**

Chemical Name	Amount	CAS Number
POTASSIUM HYDROXIDE	< 10.0%	1310-58-3

**NON-HAZARDOUS COMPONENTS**

Chemical Name	Amount	CAS Number
POTASSIUM PHOSPHONATE	< 10.0%	TRADESECRET
BALANCE NON-HAZARDOUS INGREDIENTS-water	> 80.0%	N/A

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

**HAZARDS DISCLOSURE:** This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. As defined under Sara 311 and 312, this product contains no known hazardous materials.

**MISCELLANEOUS:** Contains Potassium Hydroxide.

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW  
DANGER**

Corrosive material. Causes skin/eye irritation and or burns.

HMIS Rating      Health: 2  
Flammability: 0  
Reactivity: 0

NFPA Rating      Health: 2  
Flammability: 0  
Reactivity: 0  
Special Hazard: Corrosive

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**POTENTIAL HEALTH EFFECTS**

EYE: Corrosive, contact causes severe eye burns.

SKIN: Can cause chemical burn.

INHALATION: Vapors and/or aerosols which may be formed at room temperatures may be irritating to eyes and respiratory tract. Proper Ventilation is required.

INGESTION: Corrosive and may cause severe and permanent damage to mouth, throat, and stomach.

SIGNS AND SYMPTOMS OF EXPOSURE: Exposure may lead to rash or burn.

REPRODUCTIVE HAZARDS: No reproductive hazards.

CARCINOGENICITY INFORMATION: No known cancer hazards.

MISCELLANEOUS: Solutions extremely slippery when spilled.

**4. FIRST AID MEASURES**

EYE CONTACT FIRST AID: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT FIRST AID: Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

INHALATION FIRST AID: Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen. Get medical attention if cough or other symptoms develop. Remove from area of exposure. Seek immediate medical attention if respiratory irritation or distress continues.

INGESTION FIRST AID: Give milk or water. Do not induce vomiting. Get medical attention immediately.

STATEMENT OF PRACTICAL TREATMENT: Always have plenty of water available for first aid.

NOTES TO PHYSICIAN: Treat patient symptomatically.

**5. FIRE FIGHTING MEASURES****FLAMMABLE PROPERTIES**

COC Flash Point: None      TCC Flash Point: None

Auto-ignition Temperature: None

FLAMMABLE LIMITS IN AIR      LEL: None      UEL: None

EXTINGUISHING MEDIA: Will not burn.

FIRE & EXPLOSION HAZARDS: Material will not burn.

FIRE FIGHTING INSTRUCTIONS: Contaminated extinguishing water must be disposed of in accordance with applicable regulations.

COMBUSTION PRODUCTS: Carbon Monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

**6. ACCIDENTAL RELEASE MEASURES**

SAFEGUARDS (PERSONNEL): Protect skin and eyes from exposure. Wear appropriate personal protective equipment.

INITIAL CONTAINMENT: Floor may become slippery. Contain spilled material. Wash area to prevent slipping. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

LARGE SPILLS PROCEDURE: Forms smooth, slippery surfaces on floors, posing an accident risk. Clean up spills immediately, observing precautions in Protective Equipment section. Neutralize spill with a weak acid such as vinegar or acetic acid. Flush spill area with water to wastewater treatment system.

After removal, flush contaminated area thoroughly with water. Or, absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container and dispose of in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**SMALL SPILLS PROCEDURE:** Floor may become slippery. Wash with water or absorb spills with inert material. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

## **7. HANDLING AND STORAGE**

### RECOMMENDED STORAGE TEMPERATURE

Minimum: 4.4°C (39.9°F)      Maximum: 48.9°C (120.0°F)

### SHELF LIFE: (in original, sealed containers)

7 years @ 4.4°C      4 years @ 48.9°C

**HANDLING (PERSONNEL):** Avoid contact with eyes, skin, and clothing. Empty drums should be completely drained (triple rinsed), properly bunged, and promptly returned to a drum reconditioner, or properly disposed of. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

**HANDLING (PHYSICAL ASPECTS):** Keep container closed to avoid contamination.

**STORAGE PRECAUTIONS:** Store in a cool dry place. Do not stack drums more than three pallets high. Store in a tightly closed container. Do not store with acidic materials.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Good general ventilation should be sufficient to control airborne levels. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**EYE / FACE PROTECTION REQUIREMENTS:** When splashing of the material may occur, chemical goggles and a face shield are recommended.

**SKIN PROTECTION REQUIREMENTS:** Wear protective gloves to minimize skin contact. Nitrile rubber and PVC are suitable protective materials; Neoprene is recommended. Wash hands thoroughly after handling.

**RESPIRATORY PROTECTION REQUIREMENTS:** Under normal use conditions, with adequate ventilation, no special handling equipment is required. At elevated temperatures, > 110°F, ventilation is required.

**MISCELLANEOUS:** Wear an apron and protective clothing.

**EXPOSURE GUIDELINES:** No Information Available.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

FORM	Liquid
COLOR	Amber
ODOR	Mild
BOILING POINT	>212°F
SOLUBILITY IN WATER	Complete
SPECIFIC GRAVITY	1.188 (Water = 1)
BULK DENSITY	10
MELTING/FREEZING POINT	32°F
PH	14
PH (5% B.V.)	13.4

**10. STABILITY AND REACTIVITY**

STABILITY: Stable.

POLYMERIZATION: Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with Acidic conditions. May corrode glass, copper, aluminum, zinc, and their alloys.

DECOMPOSITION: Decomposition will not occur if handled and stored properly. Product may decompose at temperatures above 270°C and release carbon, nitrogen or oxides.

CONDITIONS TO AVOID: This material is safe under normal storage and handling conditions. Avoid contact with this material and copper, aluminum, zinc, and their alloys.

**11. TOXICOLOGICAL INFORMATION**

EYE EFFECTS: Can cause severe eye irritation including burns and or permanent damage.

SKIN EFFECTS: Contact may cause skin irritation, rash or burns.

ACUTE ORAL EFFECTS: May cause diarrhea and or vomiting along with tissue burns.

ACUTE INHALATION EFFECTS: Inhalation of this material is irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory which may cause permanent lung damage.

REPRODUCTION AND BIRTH EFFECTS: There are no known or reported effects on reproductive function or fetal development.

CHRONIC EFFECTS: There are no known or reported effects from repeated exposure.

**12. ECOLOGICAL INFORMATION**

No information available.

**13. DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL: Uncleaned empty containers should be disposed of in the same manner as the contents. Dilute or neutralize with acid and discharge to an industrial sewage treatment facility. Or bury in an approved sanitary landfill. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements. For additional waste disposal information contact your local NuGenTec representative at (888)99-NuGen.

CONTAMINATED MATERIALS: Wash contaminated clothing before reuse.

CONTAINER DISPOSAL: Containers should be triple rinsed prior to disposal.

**14. TRANSPORTATION INFORMATION**

PRODUCT LABEL	NuEtch E 3
D.O.T. SHIPPING NAME	Corrosive Liquid
TECHNICAL SHIPPING NAME	Corrosive Liquid, Potassium Hydroxide
D.O.T. HAZARD CLASS	Corrosive
UN NUMBER	1760 Corrosive Liquid, NOS
PRODUCT RQ (LBS)	10,000
D.O.T. LABEL	Corrosive Liquid
D.O.T. PLACARD	#8
BULK CLASS	N/A
PACKAGE CLASS	55

MISCELLANEOUS: Export Classification, organic surface active agents (other than soap), washing preparations and cleaning preparations, schedule B # 3402.90.5030.

## **15. REGULATORY INFORMATION**

EEC Symbols and Indications of Danger: Corrosive (C)

R-Phrases: R36/38 - Irritating to eyes and skin.

S-Phrases: S24/25 - Avoid contact with skin and eyes.

WHMIS Hazard Symbols: Class E - Corrosive Material

Canadian Disclosure List: Potassium Hydroxide (1310-58-3)

CERCLA Hazardous Substances: Potassium Hydroxide (1310-58-3) -- RQ 1000 lb

MISCELLANEOUS INFORMATION: This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS).

## **16. OTHER INFORMATION**

PREPARED BY: Donato Polignone  
APPROVAL DATE: May 31, 2007  
SUPERCEDES DATE: July 23, 2002  
PRD NUMBER: MCE103 (Official Copy)

ADDITIONAL INFORMATION: The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of NuGeneration Technologies, LLC. The data on this sheet are related only to the specific material designated herein. NuGeneration Technologies, LLC assumes no legal responsibility for use or reliance upon these data.

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