

# MATERIAL SAFETY DATA SHEET

(MSDS Sheet is in compliance with 29CFR 1910. 1200)

**Manufacturer:**  
IMEB INC.  
170 Vallecitos De Oro, Suite A  
San Marcos, CA 92069  
Chemtec: 800-424-9300

**Date Prepared:** 11/30/1998  
**CAT #:** NA-32 or NA-100

**Product Trade name:** Nitric Acid Decal Solution  
**Product Description:** Biological Bone Decalcification Solution

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## Section I Hazardous Composition Information

Hazardous Components	CAS No.	OSHA PEL	ACGIH / TLV	TWA
Nitric Acid	7697-37-2	n/a	n/a	2mg/m3

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## Section II Physical and Chemical Characteristics

**Specific Gravity:** n/a (Water = 1.0)@ 77 F  
**Solubility in Water:** Soluble  
**SP. Gravity of Vapor:** n/a  
**Evaporation Rate (n-Bu Acetate = 1):** n/a  
**Vapor Pressure:** n/a  
**Viscosity:** n/a  
**Boiling Point:** n/a  
**Color:** Colorless to slight yellow      **Odor:** Strong pungent odor      **State:** Liquid

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## Section III Stability and Reactivity

**Stability:** Stable  
**Conditions to Avoid:** n/a  
**Hazardous Polymerization:** Will not occur.  
**Incompatible Materials:** Highly reactive with alkalis, metals, organic materials, reducing agents, acids.  
**Hazardous Decomposition Products:** Products of biodegradation are nitric acid fumes.

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## Section IV Fire and Explosion Data

**Flashpoint:** Non-flammable  
**Flammable Limits:**      **LEL:** n/a      **UEL:** n/a  
**Auto-Ignition Temperature:** n/a  
**Extinguishing Media:** Foam, Dry Chemical, CO2.  
**Special Fire Fighting Procedure:** n/a  
**Decomposition Products Under Fire Conditions:** May produce acrid smoke conditions.

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## Section V Health Hazard Data

### Acute Health Effects:

**Eye Contact:** Contact with eyes will cause irritation.  
**Skin Contact:** Contact with skin will cause irritation.  
**Inhalation:** Contact by inhalation will cause mucous membrane irritation and lung irritation.  
**Ingestion:** Contact by ingestion will cause discomfort.

## Chronic Health Effects:

**Eye Contact:** Prolonged exposure will cause chemical burns to eyes and possible blindness.

**Skin Contact:** Prolonged exposure will cause severe chemical burns to skin and tissue components.

**Inhalation:** Prolonged inhalation will cause irritation to mucous membranes and damage to respiratory system.

**Ingestion:** Repeated exposure by ingestion may cause general deterioration of health by accumulation in one or more target organs. May be fatal if swallowed.

**Medical Conditions Aggravated by Exposure:** n/a

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## Section VI                      Emergency First Aid Procedures

**Eye Contact:** Flush eye with copious amounts of water or saline solution. Seek Medical Attention.

**Skin Contact:** Wash contact area with soap and water. Seek medical attention if symptoms persist.

**Inhalation:** Remove employee to well ventilated area. Seek immediate medical attention. Consult medical advise from trained personnel for unconscious victim.

**Ingestion:** Do not induce vomiting. Seek immediate medical attention.

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## Section VII                      Spill, Disposal and Storage Methods

**Accidental Spill:** Immediately inform employees. Wear gloves and goggles and absorb spill with acid neutralizing absorbent. If not available, add baking soda to spill, followed with an absorbent such as sand or paper towels. Clean up spill with soap and water. Never use bleach or products containing chlorine.

**Waste Disposal:** All waste must be disposed in accordance to local, state, and federal regulations.

**Storage:** Store in original container or LDPP, HDPE or any plastic container. Corrosive to metals. Store at room temperature.

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## Section VIII                      Personal Protection and Handling

**Ventilation:** Work in well ventilated area.

**Respiratory Protection:** Wear OSHA approved respirators.

**Eye Protection:** Wear goggles or splash shield.

**Protective Gloves:** Wear latex gloves or impermeable protective gloves.

**Other Protective Clothing or Equipment:** Wear a rubber or plastic lab apron.

**Hygienic Practices:** Wash hands before meals or breaks.

**Federal and State Regulations:** n/a.

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