

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 #: HA-32 or HA-100

Product Trade name: Hydrochloric Acid / Formic Acid Decal Solution
Product Description: Biological Bone Decalcification Solution

Section I Hazardous Composition Information

Hazardous Components	CAS No.	OSHA PEL	ACGIH / TLV	TWA
Formic Acid	n/a	n/a	10 ppm	n/a
Hydrochloric Acid	7647-01-0	5 ppm	n/a	7 mg/m

Section II Physical and Chemical Characteristics

Specific Gravity: 1.1 (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: 198 F
Color: Colorless
Odor: Strong pungent odor
State: Liquid

Section III Stability and Reactivity

Stability: Stable
Conditions to Avoid: n/a
Hazardous Polymerization: Will not occur.
Incompatible Materials: Strong Alkalines, metals.
Hazardous Decomposition Products: Products of biodegradation are Carbon Monoxide; Hydrogen and Chlorine Dioxide.

Section IV Fire and Explosion Data

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

Section V Health Hazard Data

Acute Health Effects:

Eye Contact: Contact with eyes may cause irritation.
Skin Contact: Contact with skin may cause irritation.
Inhalation: May cause inhalation hazard with mild mucous membrane irritation.

Ingestion: No ingestion hazard identified from available data.

Chronic Health Effects:

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

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

Inhalation: Prolonged inhalation may cause irritation to mucous membranes and possible asphyxiation.

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: This product contains a chemical known to the state of California to cause birth defects and other reproductive harm.

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. Drink several glasses of water or milk. Seek immediate medical attention.

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 or sodium hyposulfates.

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.

Section VIII Personal Protection and Handling

Ventilation: Work in well ventilated area.

Respiratory Protection: No special respiratory protection is recommended under anticipated normal use.

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: Massachusetts Right To Know: Hydrochloric Acid.

THIS INFORMATION RELATES TO THE SPECIFIC TRADE NAME PRODUCT DESIGNATED ON THIS MSDS SHEET. INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION.