

## MATERIAL SAFETY DATA SHEET-#'s 3362, 3363

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### Section I: IDENTIFICATION

*Product Name:* **DECALCIFYING SOLUTION**  
**Hydrochloric Acid**

*Date Prepared:* 04/24/03  
*Item Number(s):* 3362, 3363  
*Emergency Phone:* 800-424-9300

### Section II: COMPOSITION

<i>Hazardous Component(s):</i>	<i>CAS Number</i>	<i>OHSA PEL, ACGIH TLV/STEL(PPM)</i>	<i>NFPA</i>	
Hydrochloric Acid < 10%	7647-01-0	5 ppm	7.5	Health 1 Flammability 0 Reactivity 0

### Section III: PHYSICAL DATA

<i>Boiling Point:</i>	~212°F	<i>Specific Gravity (H<sub>2</sub>O = 1):</i>	~1.
<i>Vapor Pressure mm Hg/20°C:</i>	18	<i>Percent Volatile by Vol:</i>	10%
<i>Vapor Density (Air 1:1):</i>	0.7	<i>Evaporation Rate (ether = 1):</i>	NA
<i>Solubility in H<sub>2</sub>O:</i>	Complete	<i>Appearance &amp; Odor:</i>	Colorless liquid, chlorine odor

### Section IV: FIRE/EXPLOSION HAZARD

*Flash Point:* NA      *Flammable Limits:* LEL NA      UEL NA  
*Extinguishing Media:* Water spray, dry chemical, CO<sub>2</sub> and foam  
*Special Fire Fighting Procedures:* Wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in a fire situation. Do not use direct water stream.  
*Unusual Fire & Explosion Hazards:* Corrosive! Handle with care

### Section V: REACTIVITY

*Stability:* Stable      *Material to Avoid:* Strong bases etc.  
*Hazardous Decomposition or Byproducts:* Oxides of carbon, chlorine and nitrogen  
*Hazardous Polymerization:* Does not occur      *Conditions to Avoid:* Excessive heat

### Section VI: HEALTH HAZARDS

*Routes of Entry:* Inhalation, Skin and Ingestion      *Target Organs:* Lungs and eyes  
*Acute:* Vapors may cause eyes, skin and respiratory irritation, nausea, headache and vomiting.  
*Chronic:* May cause lung and respiratory problems.  
*Carcinogenicity:* Not classified as a human carcinogen.  
*Signs/Symptoms of Exposure:* Slightly hazardous to skin in the concentration provided. Protect eyes and respiratory system from mist. Vision blurring, burning sensation and headache.

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### **Section VI: HEALTH HAZARDS**

*Emergency First Aid:*

**Skin:** Remove contaminated clothing. Wash affected area with soap and water.

**Eyes:** Thoroughly flush eyes with water. Contact a physician if irritation persist.

**Ingestion:** Rinse mouth thoroughly with water, provided person is conscious and contact a physician.

**Inhalation:** Remove person to fresh air. If not breathing, give artificial respiration and contact physician.

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### **Section VII: SAFE HANDLING**

*Chemical Release or Spill:* Isolate the spill area with sand, or other absorbent material. Place all contaminated material in a closed container for disposal.

*Waste Disposal Method:* All liquid and or contaminated material should be disposed of in DOT approved waste containers. Comply with all Federal, State and Local regulations for disposal.

*Precautions for Handling and Storing:* Avoid excessive heat . For large quantities, store in safety cabinet. Use in ventilated area.

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### **Section VIII: CONTROL MEASURES**

*Respiratory Protection:* Not normally required. If used in a poorly ventilated area use under an approved fume hood or NIOSH approved respirator.

*Ventilation:* Special flammable exhaust hood if vapor concentration is high. In well-ventilated areas, mechanical exhaust is sufficient.

*Protective Gloves:* Chemical resistant      *Eye Protection:* Safety glasses

*Other Protective Clothing or Equipment:* Normal laboratory apparel suggested by Good Laboratory Practices

*Work/Hygienic Practices:* Wash thoroughly with soap and water after handling.

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The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Astraldiagnosics shall not be held liable for any damage resulting from handling or contact with this product.

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