

# MATERIAL SAFETY DATA SHEET

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## DELTA MEDICAL, INC.

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630-264-6001

*DeltaCAL Decalcifier*

### PRODUCT INFORMATION

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**TRADE NAMES OR SYNONYMS:** *DeltaCAL Decalcifier*  
**FORMULA:** PROPRIETARY, CONFIDENTIALITY REQUIRED  
**CHEMICAL FAMILY:** SPECIMEN DECALCIFER FOR USE IN THE IN VITRO PREPARATION OF HISTOLOGICAL MATERIALS.

### ACTIVE INGREDIENTS

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MATERIAL OR COMPONENT	APPROXIMATE %
HYDROGEN CHLORIDE, AQUEOUS	LESS THAN 10
DELTA PROPRIETARY COMPOUNDS	LESS THAN 6

**NOTE:** This material is an aqueous organic salt solution and as such should **NOT** be considered hazardous under normal use conditions. Laboratory tests indicate material to be *biodegradable*. The active ingredient for calcium removal in *DeltaCAL* is Hydrochloric acid. (HCl) None of the ingredients found in *DeltaCAL* are known to be carcinogenic.

### PHYSICAL DATA

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**BOILING POINT:** 213° F  
**SOLUBILITY IN WATER:** MISCIBLE  
**SPECIFIC GRAVITY, (WATER = 1):** 1.045 AT 17<sup>o</sup> C  
**VAPOR PRESSURE:** 30 TORR.  
**VAPOR DENSITY, (AIR = 1):** GREATER THAN 1  
**PERCENT VOLATILE BY VOLUME:** 96.7%  
**APPEARANCE:** DARK LIQUID  
**ODOR:** CHARACTERISTIC  
**EVAPORATION RATE, (WATER = 1):** SLOW  
**PHYSICAL STATE:** LIQUID

### FIRE AND EXPLOSION HAZARD DATA

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**FLASH POINT:** NO FLASH POINT, EXTINGUISHES FLAME.  
**EXTINGUISHING MEDIA:** DOES NOT SUPPORT COMBUSTION.  
**SPECIAL FIRE FIGHTING PROCEDURES:** NONE- WATER WILL CONTROL, AS WILL CO<sub>2</sub>.  
**UNUSUAL FIRE & EXPLOSION HAZARDS:** NON-COMBUSTIBLE OR EXPLOSIVE.  
**HEALTH:** 0  
**FLAMMABILITY:** 0  
**REACTIVITY:** 0  
**PERSONAL PROTECTION:** A Glasses

## HEALTH HAZARD DATA

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**THRESHOLD LIMIT VALUE:** NONE FOR TOTAL - MATERIAL IS AN AQUEOUS ORGANIC SALT SOLUTION AND AS SUCH HAS LITTLE VAPOR PRESSURE AND NO NOXIOUS FUMES.

**EFFECTS OF OVEREXPOSURE:** NOT CONSIDERED HAZARDOUS WHEN USED AS DIRECTED.

**EMERGENCY FIRST AID PROCEDURES:** IF EYE/SKIN CONTACT, COPIOUS WATER RINSE. CONSULT PHYSICIAN. NOT TO BE TAKEN INTERNALLY. IF INGESTED- DO NOT INDUCE VOMITING - DRINK MILK, EGG WHITES, ETC. AS DIRECTED BY PHYSICIAN.

## REACTIVITY DATA

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**STABILITY:** STABLE

**INCOMPATIBILITIES (MATERIALS TO AVOID):** THE COMBINATION OF HYDROGEN CHLORIDE AND FORMALDEHYDE GASES CAN FORM bis-chloromethyl ether, A DANGEROUS CARCINOGENIC COMPOUND. **DeltaCAL** DISCOLORS AND WILL CORRODE MOST METALS. AVOID EXPOSURE TO METAL CASSETTES, COUNTERTOPS, SLIDE RACKS OR FERROUS ITEMS.

**HAZARDOUS DECOMPOSITION PRODUCTS:** NONE

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

**CONDITIONS TO AVOID:** EXCESSIVE HEATING OVER 120° F

## SPILL AND DISPOSAL PROCEDURES

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**ACTION TO TAKE FOR SPILLS:** RINSE WITH COPIOUS AMOUNTS OF WATER TO DILUTE; SODIUM BICARBONATE MAY ALSO BE USED TO SOAK UP AND NEUTRALIZE.

**DISPOSAL METHOD:** EXPENDED OR USED MATERIAL MAY BE DISPOSED DOWN SEWER WITH WATER FLUSH. MATERIAL IS **BIODEGRADABLE** - EVEN AS RECEIVED.

## SPECIAL HANDLING INFORMATION

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**VENTILATION:**

- 1. LOCAL EXHAUST: NORMAL**
- 2. USE EXHAUST HOODS WHEN WORKING WITH HIGH VAPOR CONCENTRATIONS OF FORMALDEHYDE**
- 3. RESPIRATORY PROTECTION: NONE REQUIRED**

**PROTECTIVE GLOVES:** AS RECOMMENDED BY LAB SAFETY DEPARTMENT.

**EYE PROTECTION:** AS RECOMMENDED BY LAB SAFETY DEPARTMENT.

**OTHER PROTECTIVE EQUIPMENT:** AS RECOMMENDED BY LAB SAFETY DEPARTMENT.

## SPECIAL PRECAUTIONS

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**HANDLING AND STORING:** STORE **DeltaCAL** IN TIGHTLY CLOSED CONTAINERS

**CAN MATERIAL BE STORED OUTSIDE?** YES, MAINTAIN MATERIAL ABOVE 10° F

**IS MATERIAL FREEZABLE?** YES, AT AROUND 10° F

**OTHER PRECAUTIONS:** Most **DeltaCAL** tissue decalcification can be accomplished in an average of one half to four hours. Please use this product only as directed. Use **DeltaCAL** at ambient or room temperature.

The suitability of this product for one's intended purpose is left to the user's judgement and responsibility. For additional product information, please contact Delta Medical. This data is furnished independent of any sales of the product only for your investigation and independent verification. While information is believed to be correct, manufacturer shall in no event be responsible for any damage whatsoever, directly or indirectly, resulting from the publication or use of or reliance upon data contained herein. No warranty, either expressed or implied, of any merchantability, of fitness, or of any nature with respect to the product, or to the data, is made herein. This revised report complies with MSDS rules and is in accordance with 29 CFR 1910.1200-1500 Hazardous Communication Act effective November 25, 1985 including Subpart Z.