# MATERIAL SAFETY DATA SHEET

FRC - DIVISION OF CINE MAGNETICS INC.

#### SECTION I

PRODUCT NAME: DENT-X EXCEL X-RAY DEVELOPER CATALOGUE NUMBER(S): 999-2602-001, 999-2602-201 MANUFACTURER: FRC - Division of Cine Magnetics Inc.

524 South Columbus Avenue Mt. Vernon, NY 10550

PRODUCT INFORMATION: (914)-667-1002 PREPARATION DATE OF MSDS: 6/1/92

EXPOSURE or ACCIDENT EMERGENCY: CHEMTREC (800) 424-9300

#### SECTION II: COMPONENT AND REGULATORY INFORMATION

COMPONENTS (REGULATORY LISTS)	CAS REG #	OSHA PEL	ACGIH TLV	%WT
Water	7732-18-5	N/A	N/A	60-100
Sodium Sulfite	7757-83-7	N/A	N/A	7-13
Potassium Hydroxide (A)	1310-58-3	N/A	(TWA) 2 mg/m3	1-5
** Hydroquinone (B,C)	123-31-9	(TWA) 2 mg/m3	(TWA) 2 mg/m3	1-5
Boric Acid	10043-35-3	N/A	N/A	1-5

\*\* COMPONENT SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT OF 1986 (40 CFR 372).

# REGULATORY LISTS FOR APPLICABLE COMPONENTS

- A CERCLA HAZARDOUS SUBSTANCE LIST
- B SARA TITLE III EXTREMELY HAZARDOUS SUBSTANCE LIST (SECTION 302)
- C SARA TITLE III TOXIC CHEMICAL SUBSTANCE LIST (SECTION 313)
  D CALIFORNIA (PROP. 65) LIST OF CANCER CAUSING SUBSTANCES
  E RESOURCE CONSERVATION AND RECOVERY ACT HAZARDOUS WASTE LIST

DOT SHIPPING NAME: Non-Hazardous Aqueous Solution

HAZARD CLASS: Not Applicable ID #: Not Applicable

NFPA RATING: HEALTH - 2 FLAMMABILITY - 0 REACTIVITY - 0

SECTION III: PHYSICAL DATA

SPECIFIC GRAVITY: 1.12 pH: 10.2 **SOLUBILITY IN WATER:** Completely soluble. BOILING POINT: Approx. 212 F

VOLATILE ORGANIC CONTENT: 0.02 Lbs/Gallon

VAPOR PRESSURE: Not Available

VAPOR PRESSURE: Not Available

VAPOR DENSITY: Not Available

APPEARANCE AND ODOR: Red solution, aldehyde odor

SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED): None

FLAMMABLE LIMITS - LOWER EXPOSURE LIMIT: N/A UPPER EXPOSURE LIMIT: N/A EXTINGUISHING MEDIA: Any applicable to the primary cause of fire.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate personnel to a safe area. Firefighters

should wear self-contained breathing apparatus.

UNUSUAL FIRE HAZARDS: Excessive heat may release sulfur dioxide vapors.

#### SECTION V: REACTIVITY

STABILITY: Stable CONDITIONS TO AVOID: None

INCOMPATIBILITY (AVOID): Avoid strong acids and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur Dioxide

POLYMERIZATION: Does not polymerize. CONDITIONS TO AVOID: None

\* CEILING VALUE; (TWA) - TIME WEIGHTED AVERAGE: N/A - NOT APPLICABLE

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# SECTION VI: SPILL AND WASTE DISPOSAL INFORMATION \*\*\*\* SPILLS \*\*\*\*

Use appropriate protective equipment. Dike the spill and soak up with absorbant material. Prevent liquid from entering sewers or waterways. Dispose of in accordance with Federal, State, and Local Regulations.
\*\*\*\* WASTE DISPOSAL \*\*\*\*

Discharge to sewer requires the approval of permitting authority and may require pretreatment. Treatment, storage, transportation, and disposal must be in accordance with Federal, State, and Local Regulations.

# SECTION VII: HEALTH HAZARDS AND FIRST AID INFORMATION \*\*\*\* HEALTH HAZARDS \*\*\*\*

EYE CONTACT: Irritation or burning may occur with possible tissue destruction. Possible discoloration of the conjunctivia.

SKIN CONTACT: Reddening, swelling or burning may occur. Hydroquinone has been known to cause dermatitis.

INGESTION: Corrosion of tissue may occur. Nausea, vomiting, or abdominal pain possible. Large doses of sulfite may cause circulatory disturbances and central nervous system depression.

INHALATION: Concentrated mists may irritate or damage respiratory tract and lungs. May cause nausea or vomiting.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Sulfites may cause allergic reactions in some asthmatics.

CARCENOGENICITY: None of the chemicals used in this product are listed on NTP, IARC, or OSHA listings of human carcinogens.
\*\*\*\* FIRST AID \*\*\*\*

EYE: Flush with water for 15 minutes. Obtain medical attention. Check for corneal injury.

SKIN: Remove contaminated clothing. Wash the exposed area thoroughly with water. Contact a physician. Wash contaminated clothing before re-use.

INGESTION: If conscious, give 2 glasses of water. Do not induce vomiting. Obtain prompt medical attention.

INHALATION: Remove to fresh air. If adverse symptoms develop, contact a physician.

# SECTION VIII: SPECIAL PROTECTION INFORMATION

VENTILATION: Ten room volumes per hour is recommended under normal conditions. PROTECTIVE EQUIPMENT RECOMMENDED: Chemical splash goggles, latex or neoprene gloves, lab coat, and eye wash station. For poorly ventilated areas a NIOSH cartridge respirator is recommended.

# SECTION IX: SPECIAL PRECAUTIONS

STORAGE and HANDLING PRECAUTIONS: Store in a well ventilated area. Keep container tightly capped when not in use. Do not store food, drink, or tobacco in areas where contamination could occur with this product.

OTHER PRECAUTIONS: Avoid breating vapors. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not take internally. Keep out of reach of children.

CATALOGUE NUMBER(S): 999-2602-001, 999-2602-201 Page 2/2

# MATERIAL SAFETY DATA SHEET FRC - DIVISION OF CINE MAGNETICS INC.

#### SECTION I

PRODUCT NAME: DENT-X EXCEL X-RAY FIXER

CATALOGUE NUMBER(S): 999-2602-001, 999-2602-301 MANUFACTURER: FRC - Division of Cine Magnetics Inc.

524 South Columbus Avenue Mt. Vernon, NY 10550

PRODUCT INFORMATION: (914)-667-1002 PREPARATION DATE OF MSDS: 6/1/92

EXPOSURE or ACCIDENT EMERGENCY: CHEMTREC (800) 424-9300

### SECTION II: COMPONENT AND REGULATORY INFORMATION

COMPONENTS (REGULATORY LISTS)	CAS REG #	OSHA PEL	ACGIH TLV	%WT
Water	7732-18-5	N/A	N/A	60-100
Ammonium Thiosulfate (A)	7783-18-8	N/A	N/A	7-13
Sodium Sulfite	<i>7757-83-7</i>	N/A	N/A	3 <i>-7</i>
Acetic Acid (A)	64-19-7	(TWA) 10 ppm	(TWA) 10 ppm	3-7

## REGULATORY LISTS FOR APPLICABLE COMPONENTS

A - CERCLA HAZARDOUS SUBSTANCE LIST

B - SARA TITLE III EXTREMELY HAZARDOUS SUBSTANCE LIST (SECTION 302)

C - SARA TITLE III TOXIC CHEMICAL SUBSTANCE LIST (SECTION 313)
D - CALIFORNIA (PROP. 65) LIST OF CANCER CAUSING SUBSTANCES
E - RESOURCE CONSERVATION AND RECOVERY ACT HAZARDOUS WASTE LIST

DOT SHIPPING NAME: Non-Hazardous Aqueous Solution

HAZARD CLASS: Not Applicable ID #: Not Applicable

NFPA RATING: HEALTH - 2 FLAMMABILITY - 0 REACTIVITY - 0

# SECTION III: PHYSICAL DATA

pH: 4.6 SPECIFIC GRAVITY: 1.10 SOLUBILITY IN WATER: Completely soluble. BOILING POINT: Approx. 212 F EVAPORATION RATE: Not Available

VOLATILE ORGANIC CONTENT: 0.15 Lbs/Gallon VAPOR PRESSURE: Not Available %VOLATILITY (as Water): 60-100 as Water. VAPOR DENSITY: Not Available

APPEARANCE AND ODOR: Clear, colorless solution, vinegar odor

# SECTION IV: FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED): None

FLAMMABLE LIMITS - LOWER EXPOSURE LIMIT: N/A UPPER EXPOSURE LIMIT: N/A EXTINGUISHING MEDIA: Any applicable to the primary cause of fire.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate personnel to a safe area. Firefighters

should wear self-contained breathing apparatus.

UNUSUAL FIRE HAZARDS: Excessive heat may release ammonia vapors.

# SECTION V: REACTIVITY

STABILITY: Stable CONDITIONS TO AVOID: None

INCOMPATIBILITY (AVOID): Avoid strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur Dioxide and Ammonia

POLYMERIZATION: Does not polymerize. CONDITIONS TO AVOID: None

\* CEILING VALUE; (TWA) - TIME WEIGHTED AVERAGE; N/A - NOT APPLICABLE Page 1/2

# SECTION VI: SPILL AND WASTE DISPOSAL INFORMATION \*\*\*\* SPILLS \*\*\*\*

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\*\*\*\* WASTE DISPOSAL \*\*\*\*

Discharge to sewer requires the approval of permitting authority and may require pretreatment. Treatment, storage, transportation, and disposal must be in accordance with Federal, State, and Local Regulations.

# SECTION VII: HEALTH HAZARDS AND FIRST AID INFORMATION \*\*\*\* HEALTH HAZARDS \*\*\*\*

EYE CONTACT: Irritation or burning possible if contacted. High concentrations of acetic acid vapors can cause excess blinking, tear production, and eye discomfort.

SKIN CONTACT: Irritation and burning possible.

INGESTION: Acetic acid can cause burning to mouth, throat esophagus, abdominal pain, nausea, vomiting, shock state, and collapse. Sodium Sulfite may cause circulatory disturbances and central nervous system damage.

INHALATION: If heated highly irritating ammonia vapors will irritate the throat. Inhaling high concentrations of acetic acid causes irritation, coughing, chest pain and

pain and breathing difficulty.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Sulfites may cause allergic reactions in some asthmatics.

CARCENOGENICITY: None of the chemicals used in this product are listed on NTP, IARC, or OSHA listings of human carcinogens. \*\*\*\* FIRST AID \*\*\*\*

EYE: Flush with water for 15 minutes. Obtain medical attention.

SKIN: Remove contaminated clothing. Wash the exposed area thoroughly with water. Contact a physician. Wash contaminated clothing before re-use.

INGESTION: If conscious, give 2 glasses of water. Do not induce vomiting. Obtain prompt medical attention.

INHALATION: Remove to fresh air. If adverse symptoms develop, contact a physician.

# SECTION VIII: SPECIAL PROTECTION INFORMATION

VENTILATION: Ten room volumes per hour is recommended under normal conditions. PROTECTIVE EQUIPMENT RECOMMENDED: Chemical splash goggles, latex or neoprene gloves, lab coat, and eye wash station. For poorly ventilated areas a NIOSH cartridge respirator is recommended.

#### SECTION IX: SPECIAL PRECAUTIONS

STORAGE and HANDLING PRECAUTIONS: Store in a well ventilated area. Keep container tightly capped when not in use. Do not store food, drink, or tobacco in areas where contamination could occur with this product. OTHER PRECAUTIONS: Avoid breating vapors. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not take internally. Keep out of reach of children.

CATALOGUE NUMBER(S): 999-2602-001, 999-2602-301

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