

# MATERIAL SAFETY DATA SHEET

MSDS DATE:07/26/07

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: ACETIC ACID, 1%  
SYNONYMS: ETHANOIC ACID; METHANE CARBOXYLIC ACID; ETHYLIC  
PRODUCT CODES: 10042-10

MANUFACTURER: ELECTRON MICROSCOPY SCIENCES  
DIVISION: 1560 INDUSTRY ROAD/P.O. BOX 550  
ADDRESS: HATFIELD, PA 19440

EMERGENCY PHONE: 215-412-8400  
CHEMTREC PHONE: 800-424 -9300

FAX PHONE: 215-412-8450

CHEMICAL NAME: N/A  
CHEMICAL FAMILY: N/A

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## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

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**INGREDIENT:**  
ACETIC ACID, GLACIAL (CH<sub>3</sub>COOH)  
WATER (H<sub>2</sub>O)

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
00064-19-7	N/A	N/A	
7732-18-5			

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:	15	37
OSHA PEL STEL :	15	25
OSHA PEL CEILING:	N/A	N/A

ACGIH TLV-TWA:	10	25
ACGIH TLV STEL:	N/A	N/A
ACGIH TLV CEILING:		

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## SECTION 3: HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW: N/A

ROUTES OF ENTRY: N/A

POTENTIAL HEALTH EFFECTS

EYES: N/A

SKIN: YES

INGESTION: YES

INHALATION: YES

ACUTE HEALTH HAZARDS: CORROSIVE AND IRRITATING TO EYES, SKIN, NOSE, THROAT, LUNGS AND MUCUS MEMBRANES

CHRONIC HEALTH HAZARDS: CORROSIVE AND IRRITATING TO EYES, SKIN, NOSE, THROAT, LUNGS AND MUCUS MEMBRANES

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

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CARCINOGENICITY

OSHA: N/A

ACGIH: N/A

NTP: NO

IARC: NO

OTHER: N/A

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## SECTION 4: FIRST AID MEASURES

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EYES: FLUSH WITH WATER FOR 15 MINUTES IF IRRITATION OCCURS. SEEK MEDICAL ATTENTION

SKIN: WASH WITH SOAP AND WATER. IF IRRITATION OCCURS. SEEK MEDICAL ATTENTION. REMOVE CONTAMINATED SHOES AND CLOTHING. WASH BEFORE REUSE.

INGESTION: DO NOT INDUCE VOMITING, IF CONSCIOUS, GIVE WATER, MILK OR MILK OF MAGNESIA.

INHALATION: REMOVE TO FRESH AIRE, IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

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## SECTION 5: FIRE-FIGHTING MEASURES

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FLAMMABLE LIMITS IN AIR, UPPER: N/A  
(% BY VOLUME) LOWER: N/A

FLASH POINT: N/A

F: N/A

C: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A

F: N/A

C: N/A

NFPA HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

OTHER: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

PROTECTION:N/A

EXTINGUISHING MEDIA: WATER- SPRAY, ALCOHOL FOAM, DRY CHEMICAL OR CARBON DIOXIDE

SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE, OPERATED IN POSITIVE PRESSURE MODE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: EMITS TOXIC GASES OF ACETIC ACID, CARBON MONOXIDE, CARBON DIOXIDE. GIVES OFF FLAMMABLE VAPORS. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION.

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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ACCIDENTAL RELEASE MEASURES: WEAR SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. SHUT OFF IGNITION SOURCES. NO FLARES, SMOKING OR FLAMES IN AREA. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. NEUTRALIZE SPILL WITH SODA ASH OR LIME. WITH CLEAN SHOVEL PLACE MATERIAL INTO CLEAN DRY CONTAINER. REMOVE FROM SPILL AREA. FLUSH AREA WITH WATER.

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## SECTION 7: HANDLING AND STORAGE

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**HANDLING AND STORAGE:** KEEP CONTAINER TIGHTLY CLOSED; STORE IN COOL DRY WELL-VENTILATED AREA. AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. USE WITH ADEQUATE VENTILATION. DO NOT BREATHE VAPORS

**OTHER PRECAUTIONS:** N/A

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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**ENGINEERING CONTROLS:**CHEMICAL CARTRIDGE RESPIRATOR WITH ACID/ ORGANIC CARTRIDGE

**VENTILATION:** LOCAL EXHAUST, FUME HOOD

**RESPIRATORY PROTECTION:** CHEMICAL CARTRIDGE RESPIRATOR WITH ACID/ ORGANIC CARTRIDGE

**EYE PROTECTION:** FACE SHEILD

**SKIN PROTECTION:** RUBBER GLOVES

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** APPROVED WORK CLOTHES

**WORK HYGIENIC PRACTICES:** WASH THOROUGHLY AFTER HANDLING. WASH CLOTHING BEFORE REUSE. USE CARE WHEN HANDLING

**EXPOSURE GUIDELINES:** N/A

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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**APPEARANCE:** COLORLESS

**ODOR:** VINEGAR- LIKE ODOR

**PHYSICAL STATE:** LIQUID

**pH AS SUPPLIED:** N/A

**pH (Other):** N/A

**BOILING POINT:** N/A

F: N/A

C: N/A

**MELTING POINT:** N/A

F: N/A

C: N/A

**FREEZING POINT:**N/A

F: N/A

C: N/A

**VAPOR PRESSURE (mmHg):** N/A

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F: N/A

C: N/A

**VAPOR DENSITY (AIR = 1):** N/A

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F: N/A

C: N/A

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F: N/A

C: N/A

**EVAPORATION RATE:** N/A

**BASIS (=1):** N/A

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

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SOLUBILITY IN WATER :YES

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A

BY WT/ BY VOL @

F: N/A

C: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: N/A LBS/GAL  
WITHOUT WATER: N/A LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY: N/A

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F: N/A

C: N/A

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## SECTION 10: STABILITY AND REACTIVITY

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STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): HEAT, FLAME, OTHER SOURCES OF IGNITION

INCOMPATIBILITY (MATERIAL TO AVOID): STRONG OXIDIZING AGENTS; MOST COMMON METALS; CHROMIC ACID; NITRIC ACID; STRONG CAUSTICS; HYDROGEN PEROXIDE; ALKALIES; CARBONATES; STRONG BASES.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION: MAY NOT OCCUR

CONDITIONS TO AVOID (POLYMERIZATION): NONE

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: N/A

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## SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: N/A

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: COMPLY WITH FEDERAL, STATE, LOCAL REGULATIONS.

RCRA HAZARD CLASS: N/A

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## SECTION 13: DISPOSAL CONSIDERATIONS (con't)

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## SECTION 14: TRANSPORT INFORMATION

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### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: ACETIC ACID, 1 %  
HAZARD CLASS: N/A  
ID NUMBER: N/A  
PACKING GROUP: N/A  
LABEL STATEMENT: CORROSIVE LIQUID

### WATER TRANSPORTATION

PROPER SHIPPING NAME:  
HAZARD CLASS: SAME  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

### AIR TRANSPORTATION

PROPER SHIPPING NAME:  
HAZARD CLASS: SAME  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

OTHER AGENCIES:

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## SECTION 15: REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: ACETIC ACID 1%

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

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## SECTION 16: OTHER INFORMATION

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OTHER INFORMATION: NONE

PREPARATION INFORMATION: N/A

DISCLAIMER: IN COMPLIANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD, 2.9 C.F.R 1910. 1200, WE ARE PROVIDING YOU WITH A MSDS FOR THE HAZARDOUS MATERIAL YOU ARE PURCHASING.

IT IS YOUR RESPONSIBILITY TO EDUCATE YOUR EMPLOYEES ON THE SAFE USE OF THE HAZARDOUS MATERIAL.

ELECTRON MICROSCOPY SCIENCES MAKES NO PRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. THE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, YOU (THE CUSTOMER), SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT VERIFICATION. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO FORWARD THE INFORMATION IN THE MSDS TO YOUR CUSTOMER.