

MATERIAL SAFETY DATA SHEET
(ESSENTIALLY SIMILAR TO OSHA FORM 20, COMPLIES WITH 29CFR 1910:1200)

HAZARD RATING: HEALTH - 3, FIRE - 0, REACTIVITY - 0
MINIMAL - 0 SLIGHT - 1 MODERATE - 2 SERIOUS - 3 SEVERE - 4

*****SECTION I: GENERAL INFORMATION*****

MANUFACTURER'S NAME: CREATIVE CHEMICALS, INC.
ADDRESS: 3 CHURCH STREET
PALMER, MA 01069
TELEPHONE NUMBER: 413-283-9778
DATE ISSUED/REVISED: AUGUST 15, 2004
EMERGENCY RESPONSE NUMBER: 800-255-3924 CHEM-TEL

FORMULA NO.: C-1003
PRODUCT NAME: 20% HYDROCHLORIC ACID (MURIATIC ACID)
CHEMICAL NAME: HYDROCHLORIC ACID CONTAINING FORMULA
CHEMICAL FAMILY: HYDROCHLORIC ACID DILUTED

HAZARDOUS MATERIAL DESCRIPTION
(PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)

*****SECTION II: HAZARDOUS INGREDIENTS*****

AS LISTED IN EPA 40CFR PARTS 261 & 116 AND/OR MASS. DEQE CMR 670.00

CHEMICAL NAME	CAS NO.	% BY WEIGHT	HAZARD DATA
*HYDROGEN CHLORIDE	7647-01-0	10-20%	OSHA (PEL) 5PPM ACGIH (TWA) 5PPM

CONTAINS NO INGREDIENT LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY IARC, NTP, OR OSHA.

*THIS SUBSTANCE IS A CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) AND 40 CFR PART 372.

*****SECTION III: PHYSICAL DATA*****

BOILING POINT/RANGE (F): 230F
SPECIFIC GRAVITY: 1.119 (WATER=1)
% VOLATILE BY VOLUME: 99
EVAP. RATE (BUAC=1): COMP. TO WATER (SLOWER)
WEIGHT/GALLON: 9.32# (WATER=8.33#)
SOLUBILITY IN WATER: COMPLETE
VAPOR PRESSURE (MM/HG): NA
PHYSICAL STATE: THIN, MILKY LIQUID
VAPOR DENSITY (AIR=1): NA
ODOR: STRONG, PUNGENT ACID

*****SECTION IV: FIRE AND EXPLOSION HAZARD DATA*****

FLASH POINT (METHOD USED): NONE
FLAMMABLE LIMITS: LEL: NA UEL: NA
FIRE EXTINGUISHING MEDIA: WATER FOG, FOAM, GAS (CO2/HALON), DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES: IF POSSIBLE, MOVE CONTAINERS FROM FIRE AREA AND COOL WITH WATER SPRAY. WEAR PROTECTIVE CLOTHING, EYE, FACE, AND SKIN PROTECTION AND NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS.
UNUSUAL FIRE AND EXPLOSION HAZARDS: HYDROGEN CHLORIDE GAS IS RELEASED FROM HYDROCHLORIC ACID WHEN HEATED. THE ACID ALSO REACTS WITH MOST METALS TO PRODUCE EXPLOSIVE AND FLAMMABLE HYDROGEN GAS.

SECTION V: HEALTH HAZARD DATA***

THRESHOLD LIMIT VALUE: 5 PPM (HYDROGEN CHLORIDE)
PRIMARY ROUTES OF ENTRY: SKIN ABSORPTION AND INHALATION
EFFECTS OF OVEREXPOSURE:
...ACUTE - CORROSIVE, CAUSES SEVERE BURNS TO ALL TISSUES. DO NOT GET IN EYES, ON SKIN, OR CLOTHING. CAN BE FATAL IF SWALLOWED.
...CHRONIC - EXCESSIVE INHALATION OF VAPOR WILL CAUSE CHOKING, IRRITATE OR BURN EYES, AND RESPIRATORY TRACT.
EMERGENCY AND FIRST AID PROCEDURES:
...INHALATION - REMOVE TO FRESH AIR. GET MEDICAL ATTENTION. IF AVAILABLE, GIVE OXYGEN. GIVE ARTIFICIAL RESPIRATION IF BREATHING IS STOPPED.
...EYES - IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, KEEPING LIDS APART. GET IMMEDIATE MEDICAL ATTENTION.
...SKIN - SEE "EYES," REMOVE CLOTHING IF CONTAMINATED.
...INGESTION - DO NOT INDUCE VOMITING. DRINK LARGE QUANTITIES OF WATER OR MILK. GET IMMEDIATE MEDICAL ATTENTION.

*****SECTION VI: REACTIVITY DATA*****

STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS TO AVOID: DO NOT STORE IN METAL CONTAINERS OR AT HIGH TEMPERATURES OR IN DIRECT SUNLIGHT.
MATERIALS TO AVOID: DO NOT MIX WITH OTHER CHEMICALS. KEEP AWAY FROM COMBUSTIBLE MATERIALS, METALS, ALKALIES, ETC.
HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE GAS.

*****SECTION VII: SPILL OR LEAK PROCEDURES*****

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SPRINKLE AN EXCESS OF SODIUM BICARBONATE, SODA ASH, OR SIMILAR ALKALI ON SPILL UNTIL FOAMING CEASES AND ACID IS NEUTRALIZED. RINSE AREA WITH WATER.
WASTE DISPOSAL: DRUM OFF AND DISPOSE OF ACCORDING TO LOCAL REGULATIONS FOR HAZARDOUS WASTE.

*****SECTION VIII: SPECIAL PROTECTION INFORMATION*****

RESPIRATORY PROTECTION: NONE REQUIRED IF ADEQUATE VENTILATION. IF HIGH CONCENTRATIONS USE NIOSH/MSHA APPROVED RESPIRATOR FOR ACIDS.
VENTILATION TYPE: LOCAL EXHAUST ADEQUATE.
PROTECTIVE GLOVES: ACID RESISTANT GLOVES. RUBBER OR NEOPRENE SUGGESTED.
EYE PROTECTION: SAFETY GLASSES OR GOGGLES, FACE SHIELD.
OTHER PROTECTIVE EQUIPMENT: ACID RESISTANT APRON AND BOOTS.

*****SECTION IX: SPECIAL PRECAUTIONS*****

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: STORE IN A COOL, WELL VENTILATED AREA AWAY FROM HEAT AND DIRECT SUNLIGHT. AVOID CONTACT WITH METALS, ALKALIES, AND OXIDIZING MATERIALS.
DO NOT GET ON SKIN, EYES, OR CLOTHING. IF SPILLED ON CLOTHING, REMOVE CLOTHING QUICKLY AND FLUSH OFF EXPOSED SKIN WITH WATER.
OTHER PRECAUTIONS: DO NOT TAKE INTERNALLY. CAN BE FATAL IF SWALLOWED. USE WITH ADEQUATE VENTILATION. USE ADEQUATE EYE AND SKIN PROTECTION. WASH HANDS THOROUGHLY AFTER USE. KEEP CONTAINERS CLOSED. KEEP OUT OF THE REACH OF CHILDREN.