

DATE 11/04/04

Page 1 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form

SECTION I CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CATALOG: A0349 PREPARATION DATE.: 12/03/92

CHEMICAL NAME....: ACETIC ACID ACS GLACIAL (SPQ)

TRADE NAME.....:
ETHANOIC ACID; GLACIAL ACETIC ACID
CHEMICAL FAMILY.: ORGANIC ACID

MOLECULAR WEIGHT.: 60.05

SECTION II COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	APPR %
ACETIC ACID	64-19-7	100%

SECTION III HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUSES SEVERE BURNS.
MAY BE FATAL IF SWALLOWED.
HARMFUL IF INHALED.
MAY CAUSE DAMAGE TO RESPIRATORY PASSAGES AND LUNGS.
COMBUSTIBLE LIQUID AND VAPOR.

APPEARANCE.....:
CLEAR, COLORLESS LIQUID; PUNGENT ODOR

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

SYMPTOMS OF EXPOSURE:

CONTACT CAUSES SEVERE BURNS, EYE DAMAGE.
VAPOR INHALATION CAUSES LACHRYMATION, SEVERE IRRITATION OF
RESPIRATORY PASSAGES; BRONCHITIS, PULMONARY EDEMA AND CHEMICAL
PNEUMONITIS MAY OCCUR.
MAY BE FATAL IF SWALLOWED.

MEDICAL COND. AGGRAVATED BY EXPOSURE:
RESPIRATORY CONDITIONS

ROUTES OF ENTRY.....:
INHALATION, INGESTION OR SKIN CONTACT.

CARCINOGENICITY.....:
THE MATERIAL IS NOT LISTED (IARC, NTP, OSHA) AS CANCER CAUSING
AGENT.

SECTION IV FIRST AID MEASURES

EMERGENCY FIRST AID:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.
SKIN: IMMEDIATELY FLUSH THOROUGHLY WITH LARGE AMOUNTS OF WATER.
EYES: IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15
MINUTES.

Page 2 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form

INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF
BREATHING HAS STOPPED.
INGESTION: DO NOT INDUCE VOMITING; GET IMMEDIATE MEDICAL
ATTENTION.
REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

SECTION V FIRE FIGHTING MEASURES

FLASH POINT (F).....: 109F (CC)

FLAMMABLE LIMITS LEL (%): 5.40

FLAMMABLE LIMITS UEL (%): 16.00

EXTINGUISHING MEDIA.....:

CO2, DRY CHEMICAL "ALCOHOL" FOAM, WATER MIST

FIRE FIGHTING PROCEDURES:

WEAR SELF-CONTAINED, POSITIVE PRESSURE, BREATHING APPARATUS.
WEAR ACID-RESISTANT PROTECTIVE SUIT (FULL FACE SHIELD) WITH RUBBER
BOOTS AND GLOVES.

FIRE & EXPLOSION HAZARDS:

MODERATE FIRE AND EXPLOSION HAZARD.
VAPOR CAN TRAVEL DISTANCES TO IGNITION SOURCE AND FLASH BACK.

SECTION VI ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:

EVACUATE THE AREA OF ALL UNNECESSARY PERSONNEL.
WEAR SUITABLE PROTECTIVE EQUIPMENT LISTED UNDER EXPOSURE /
PERSONAL PROTECTION.
ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE
FREE FROM EXPLOSION OR FIRE HAZARDS.
CONTAIN THE RELEASE AND ELIMINATE ITS SOURCE, IF THIS CAN BE DONE
WITHOUT RISK.
TAKE UP AND CONTAINERIZE FOR PROPER DISPOSAL AS DESCRIBED UNDER
DISPOSAL.
COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING
RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE
QUANTITY AND OTHER REGULATORY DATA.
EM SCIENCE RECOMMENDS SPILL-X NEUTRALIZERS AND ABSORBENT AGENTS
FOR VARIOUS TYPES OF SPILLS.
ADDITIONAL INFORMATION ON THE SPILL-X PRODUCTS CAN BE PROVIDED
THROUGH THE EM SCIENCE TECHNICAL SERVICE DEPARTMENT
(609) 354-9200.

THE FOLLOWING EM SCIENCE SPILL-X NEUTRALIZER AND ABSORBENT IS
RECOMMENDED FOR THIS PRODUCT:

SX0861 ACID SPILL TREATMENT KIT

SECTION VII HANDLING AND STORAGE

HANDLING & STORAGE:

KEEP CONTAINER TIGHTLY CLOSED.
STORE ABOVE 62F, BUT AWAY FROM DIRECT HEAT, IGNITION SOURCES AND
OXIDIZERS.

NOTE: The statements contained herein are offered for informational purposes only and are intended to be followed only by persons having related technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information.

Page 3 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

Page 4 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form

DO NOT BREATHE VAPOR.
RETAINED RESIDUE MAY MAKE EMPTY CONTAINERS HAZARDOUS; USE
CAUTION!
DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

VAPOR DENSITY (AIR = 1)....: 2.07
EVAPORATION RATE (BUAC = 1): 0.97
SOLUBILITY IN WATER (%):....: MISCIBLE
APPEARANCE.....:
CLEAR, COLORLESS LIQUID, PUNGENT ODOR

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

SECTION X STABILITY AND REACTIVITY

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:
VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION
RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMIT(S) OF PRODUCT
OR ANY COMPONENT IS EXCEEDED (SEE TLV/PEL), A NIOSH/MSHA APPROVED
AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER
ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER
NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED
CONDITIONS (SEE YOUR SAFETY EQUIPMENT SUPPLIER). ENGINEERING
AND/OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE
EXPOSURE.
MATERIAL MUST BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD
OR WITH EQUIVALENT VENTILATION.
PROTECTIVE GLOVES (NATURAL RUBBER, NEOPRENE, PVC OR EQUIVALENT)
MUST BE WORN TO PREVENT SKIN CONTACT.
SAFETY GLASSES WITH SIDE SHIELDS MUST BE WORN AT ALL TIMES.
IMPERVIOUS PROTECTIVE CLOTHING SHOULD BE WORN TO PREVENT SKIN
CONTACT.
WORK / HYGENIC PRACTICES:
WASH THOROUGHLY AFTER HANDLING.
DO NOT TAKE INTERNALLY.
EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

STABILITY.....: YES
HAZARDOUS POLYMERIZATION:
DOES NOT OCCUR
HAZARDOUS DECOMPOSITION.:
COX
CONDITIONS TO AVOID.....:
HEAT; CONTACT WITH IGNITION SOURCES.
DILUTED ACID REACTS WITH METALS TO PRODUCE FLAMMABLE
HYDROGEN GAS.
MATERIALS TO AVOID.....:
() WATER
() ACIDS
() BASES
() CORROSIVES
(X) OXIDIZERS
(X) OTHER :
STRONG ALKALIES, METALS, AMINES, CYANIDES, SULFIDES,
CHROMIC ACID, NITRIC ACID, HYDROGEN PEROXIDE, CARBONATES

EXPOSURE GUIDELINES
OSHA - PEL:

COMPONENT	PPM	TWA	MG/M3	PPM	STEL	MG/M3	PPM	CL	MG/M3	SKIN
ACETIC ACID		10	25							

ACGIH - TLV:

COMPONENT	PPM	TWA	MG/M3	PPM	STEL	MG/M3	PPM	CL	MG/M3	SKIN
ACETIC ACID		10	25	15	37					

SECTION IX PHYSICAL AND CHEMICALS PROPERTIES

BOILING POINT (C 760 MMHG): 118.1C
MELTING POINT (C).....: 16.7C
SPECIFIC GRAVITY (H2O = 1): 1.049
VAPOR PRESSURE (MM HG).....: 11.4 20C
PERCENT VOLATILE BY VOL (%): 100

SECTION XI TOXICOLOGICAL INFORMATION

TOXICITY DATA:
IHL-MUS LC50: 5620 PPM/1H ORL-RAT LD50: 3530 MG/KG
SKIN-RBT LD50: 1060 MG/KG
TOXICOLOGICAL FINDINGS:
TESTS ON LABORATORY ANIMALS INDICATE MATERIAL MAY PRODUCE ADVERSE
MUTAGENIC AND REPRODUCTIVE EFFECTS.
CITED IN REGISTRY OF TOXIC EFFECTS OF SUBSTANCES (RTECS)

SECTION XII DISPOSAL CONSIDERATIONS

EPA WASTE NUMBERS: D002 D001
TREATMENT:
SPECIFIED TECHNOLOGY - NEUTRALIZE TO PH 6-9. CONTACT YOUR LOCAL
PERMITTED WASTE DISPOSAL SITE (TSD) FOR PERMISSIBLE TREATMENT
SITES.
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE
COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION XIII TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME...:
ACETIC ACID, GLACIAL

NOTE: The statements contained herein are offered for informational purposes only and are intended to be followed only by persons having related technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make no warranties, expressed or implied, and assume no liability in connection with any use of this information.

Page 5 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form

DOT ID NUMBER.....: UN2789

SECTION XIV REGULATORY INFORMATION

TSCA INVENTORY.....:
THE CAS NUMBER OF THIS PRODUCT IS LISTED ON THE TSCA INVENTORY.
COMPONENT SARA EHS SARA EHS TPQ CERCLA RQ
(302) (LBS) (LBS)

ACETIC ACID 5000

COMPONENT OSHA FLOOR LIST SARA 313 DEMINIMIS FOR SARA 313 (%)

ACETIC ACID Y

SECTION XV OTHER INFORMATION

COMMENTS:
NONE
NFPA HAZARD RATINGS:
HEALTH : 2
FLAMMABILITY : 2
REACTIVITY : 1
SPECIAL HAZARDS :

Page 6 *** TAYLOR SCIENTIFIC COMPANY ***
950 Hanley Industrial Court * St. Louis, Mo. 63144 * (314) 962-5555

MATERIAL SAFETY DATA SHEET
Essentially Similar to U.S. Department of Labor OSHA Form
