

TERMS: PEL (PERMISSIBLE EXPOSURE LEVEL) OSHA / TLV (THRESHOLD LIMIT VALUE) AMERICAN CONFERENCE OF GOVERNMENTAL HYGIENISTS / CAS# (CHEMICAL ABSTRACT SERVICE) / PPM (PARTS PER MILLION) / STEL (SHORT TERM EXPOSURE LEVEL) / TWA (TIME WEIGHTED AVERAGE)

MATERIAL SAFETY DATA SHEET

PRODUCTS MANUFACTURED BY:
AMERICAN NIAGARA • 6690 JONES MILL COURT • BLDG. "A" • NORCROSS, GA 30092
PH: (770) 441-5900 • TOLL FREE (800) 241-7708 • FAX (770) 409-7240

24 HOUR EMERGENCY 800-424-9300 CHEMTREC

TRICHLOROETHYLENE (100% VIRGIN)

SECTION I PRODUCT IDENTIFICATION

CHEMICAL NAMES & SYNONYMS

ACETYLENE TRICHLORIDE; TCE; ETHINYL TRICHLORIDE

TRADE NAME

TRICHLOROETHYLENE

SECTION II HAZARDOUS INGREDIENTS WITH CAS #'S & WEIGHT BY %

ACTIVE INGREDIENTS THAT ARE APPLICABLE	CAS NUMBERS THAT ARE APPLICABLE	TLV/PEL 50TWA; 200STEL; 100 PEL	% BY WEIGHT
TRICHLOROETHYLENE	79-01-6		99%

SECTION IIIA CHEMICAL RATING SYSTEM

CHEMICAL RATING SYSTEM WHEN APPLICABLE / NFPA (NATIONAL FIRE PROTECTION AGENCY) - PRODUCTS ARE GRADED FROM 0 TO 4 ON (H) HEALTH, (F) FLAMMABILITY, AND (R) REACTIVITY. 0 = NO SPECIAL HAZARD; 1 = SLIGHT; 2 = MODERATE; 3 = HIGH; 4 = EXTREME. THE INFORMATION FOR THIS PRODUCT IS AS FOLLOWS (*NOTE MAY NOT BE APPLICABLE ON CERTAIN TYPES OF PRODUCTS)

H = 2 F = 1 R = 0

SECTION III PHYSICAL DATA

<u>BOILING POINT (F)</u>	189° F	<u>SPECIFIC GRAVITY (WATER = 1)</u>	1.47 @ 25/25 C N/A
<u>VAPOR PRESSURE</u>	58 MM HG @ 20 DEG C	<u>EVAPORATION RATE (ETHER = 1)</u>	
<u>SOLUBILITY IN WATER (CENT)</u>	SLIGHT	<u>APPEARANCE AND ODOR</u>	COLORLESS LIQUID CHLOROFORM ODOR

SECTION IV FIRE & EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) NON-FLAMMABLE (TCC, TOC, COC) FLAMMABLE LIMITS / LOWER / UPPER
EXTINGUISHING MEDIA WATER; DRY CHEMICAL; CO₂ IN AIR @ 25 DEGREES C VOL. 8.0% 10.5%

SPECIAL FIRE FIGHTING EQUIPMENT WEAR POSITIVE PRESSURE, SELF CONTAINED BREATHING APPARATUS

UNUSUAL FIRE AND EXPLOSION HAZARDS

GIVES OFF FLAMMABLE VAPORS. VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE. COOL CONTAINERS WITH WATER MIST.

SECTION V REACTIVITY DATA

STABLE YES

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABILITY AVOID OPEN FLAMES, WELDING ARCS OR OTHER HIGH TEMPERATURE SOURCES WHICH INDUCE THERMAL DECOMPOSITION.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)

AVOID STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION

NOT APPLICABLE

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

MATERIAL SAFETY DATA SHEET (M.S.D.S.) * PAGE #2
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SECTION VI HEALTH HAZARD INFORMATION

<u>EYE</u>	MAY CAUSE EYE PAIN. MAY CAUSE SLIGHT TRANSIENT (TEMPORARY) IRRITATION WITH SLIGHT CORNEAL INJURY. VAPORS MAY IRRITATE EYES. AVOID SPLASHBACK.
<u>SKIN CONTACT</u>	PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION. REPEATED CONTACT MAY CAUSE DRYING OR FLAKING OF SKIN.
<u>SKIN ABSORPTION</u>	A SINGLE PROLONGED SKIN EXPOSURE IS NOT LIKELY TO RESULT IN ABSORPTION OF HARMFUL AMOUNTS. THE LD50 FOR RABBITS IS ABOUT 15,000 MG/KG.
<u>INGESTION</u>	SINGLE DOSE ORAL TOXICITY IS LOW. THE LD50 FOR RATS IS >10,000 MG/KG. IF ASPIRATED (LIQUID ENTERS THE LUNG), MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND RESULT IN INJURY TO OTHER BODY SYSTEMS
<u>INHALATION</u>	LEVELS OVER 1000 PPM MAY CAUSE DIZZINESS, DRUNKENNESS; CONCENTRATIONS AS LOW AS 10,000 PPM CAN CAUSE UNCONSCIOUSNESS AND DEATH. THESE HIGH LEVELS MAY ALSO CAUSE CARDIAC ARRHYTHMIAS (IRREGULAR HEART BEATS). IN CONFINED OR POORLY VENTILATED AREAS, VAPORS WHICH READILY ACCUMULATE CAN CAUSE UNCONSCIOUSNESS AND DEATH.
<u>SYSTEMIC & OTHER EFFECTS</u>	EMERGENCY & FIRST AID PROCEDURES
<u>EYE & SKIN</u>	REMOVE CONTAMINATED CLOTHING AND FLUSH EXPOSED AREAS WITH WATER FOR 5 TO 15 MINUTES. FLUSH WITH WATER. GET MEDICAL ATTENTION.
<u>INHALATION</u>	REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, ADMINISTER RESPIRATION OR OXYGEN IF AVAILABLE. CALL A PHYSICIAN.
<u>INGESTION</u>	DO NOT INDUCE VOMITING. CALL PHYSICIAN AND OBTAIN MEDICAL ATTENTION - IMMEDIATELY.
<u>NOTE TO PHYSICIAN</u>	BECAUSE RAPID ABSORPTION MAY OCCUR THROUGH LUNGS IF ASPIRATED AND CAUSE SYSTEMIC EFFECTS, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A PHYSICIAN. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGEAL CONTROL. DANGER FROM LUNG ASPIRATION MUST BE WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH. EXPOSURE MAY INCREASE MYOCARDIAL IRRITABILITY. DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY. NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGEMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

SECTION VII SPILL & DISPOSAL PROCEDURES

	<small>SMALL LEAKS</small> MOP UP, WIPE UP, OR SOAK UP IMMEDIATELY. REMOVE TO OUT-OF-DOORS.
<u>LARGE SPILLS</u>	
<u>DISPOSAL METHOD</u>	STOP SPILL AT SOURCE. EVACUATE AREA. CONTAIN LIQUID; TRANSFER TO CLOSED METAL CONTAINERS. KEEP OUT OF WATER SUPPLIES.
<u>RESPIRATORY:</u>	WHEN DISPOSING OF THE UNUSED CONTENTS, THE PREFERRED OPTIONS ARE TO SEND LICENSED RECLAIMER, OR TO PERMITTED INCINERATORS. ANY DISPOSAL PRACTICE MUST BE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. DO NOT DUMP INTO ANY BODY OF WATER. EMPTY CONTAINERS MUST BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT CUT OR WELD CONTAINER DUE TO EXPLOSION HAZARD.

SECTION VIII SPECIAL PROTECTION INFORMATION

<u>EYE</u>	NONE REQUIRED WHEN USED WITH ADEQUATE VENTILATION, AVOID SPLASH BACK.
<u>SKIN</u>	CHEMICAL SAFETY GOGGLES, CONTACT LENSES SHOULD NOT BE WORN.
<u>OTHER</u>	NEOPRENE, VITON, POLYVINYL ALCOHOL COATED GLOVES OR EQUIVALENT.
	PROTECTIVE HEADGEAR & APRON WHEN SPLASHING IS A PROBLEM
<u>VENTILATION REQUIREMENTS</u>	SUFFICIENT TO MAINTAIN BELOW PEL

SECTION IX SPECIAL PRECAUTIONS

<u>HANDLING & STORAGE</u>	AVOID CONTACT WITH SKIN AND AVOID BREATHING VAPORS. PIPE VENTS OUTDOORS. STORE IN COOL, DRY VENTILATED AREA. VAPORS HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS.
<u>OTHER</u>	PREVENT MOIST AIR FROM ENTERING STORAGE. NO SMOKING IN PRESENCE OF VAPORS.
	NON FLAMMABLE --- USE WITH CAUTION

DISCLAIMER

THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS PROVIDED PURSUANT TO 29CFR 1910.1200 TO CONVEY INFORMATION CONCERNING THE HAZARDOUS NATURE OF THE NAMED PRODUCT. THE INFORMATION SUPPLIED WAS COMPILED FROM THE MOST RELIABLE SOURCES AVAILABLE AT THE TIME OF PREPARATION AND IN LIGHT OF THE MOST REASONABLE FORSEEABLE EXPOSURE SITUATIONS EXPECTED FROM THE INTENDED USE OF THIS PRODUCT. THE MATERIAL MAY PRESENT GREATER OR LESSER HAZARD EXPOSURE UNDER OTHER CIRCUMSTANCES THAT ARE BEYOND THE CONTROL OF THE MANUFACTURER. FOLLOW ALL DIRECTIONS AND WARNINGS ON THE PRODUCT LABEL.