24 HOUR EMERGENCY SARGENT-WELCH VWR SCIENTIFIC ASSISTANCE

911 COMMERCE COURT - BUFFALO GROVE - ILLINOIS 60089-2375 CHEMTREC 800-424-9300

HAZARD RATING 1-800-727-4368

IMPORTANT 4-EXTREME HEALTH HAZARD 1 MATERIAL DATA SAFETY SHEET 3-SEVERE FLAMMABILITY 4 READ CAREFULLY BEFORE USING CHEMICAL 2-MODERATE REACTIVITY

1-SLIGHT OSHA REQUIRES THAT THIS FORM BE KEPT ON FILE.

PRODUCT NO. C3990E 0-MINIMAL

PRODUCT NAME ISOPROPYL ALCOHOL

SECTION I NAME 2-PROPANOL CHEMICAL SYNONYMS СН3СНОНСН3 67-63-0 FORMULA C.A.S. NO.

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

P.E.L. TLV UNITS PRINCIPAL HAZARDOUS COMPONENT(S) % ISOPROPYL ALCOHOL* N/A N/A N/A

*CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III.

SECTION III PHYSICAL DATA

SPECIFIC GRAVITY (H2O=1) .79

MELTING POINT ('F) -89'C SPECIFIC GRAVITY
BOILING POINT ('F) 82'C PERCENT VOLATILE
VAPOR PRESSURE (MM HG) 33@ 25'C BY VOLUME (%)
VAPOR DENSITY (AIR=1) 2.1 EVAPORATION RATE
SOLUBILITY IN WATER 100% (BUTYL ACETATE =
APPEARANCE & ODOR CLEAR, COLORLESS LIQUID, MILD ODOR. 100% 1.7

(BUTYL ACETATE =1)

SECTION IV FIRE AND EXPLOSION HAZARD DATA
FLASH POINT 12'C CLOSED CUP FLA
(METHOD USED) % B FLAMMABLE LIMITS IN AIR LOWER UPPER % BY VOLUME ----2.0 12.0

EXTINGUISHER WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE, MEDIA WATER SPRAY MAY BE USEDTO KEEP FIRE EXPOSED CONTAINERS COOL.

SPECIAL FIREFIGHTING PROCEDURES IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. WATER MAY BE USED TO DILUTE SPILLS TO A

NON-FLAMMABLE MIXTURE.

UNUSUAL FIRE AND EXPLOSION HAZARDS FLAMMABLE! AUTOIGNITION TEMPERATURE 399'C. ABOVE FLASH POINT, VAPOR AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCES AND FLASH BACK. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION.

D.O.T. ISOPROPANOL, 3, UN1219, PGII APPROVED BY U.S. DEPARTMENT OF LABOR "ESSENTIALLY SAME" TO FORM OSHA-20

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE 400 PPM (TWA)

EFFECTS OF OVEREXPOSURE

ACUTE; IRRITATION TO SKIN, EYES, LUNGS, MUCOUS MEMBRANES, AND GI TRACT. NAUSEA, NARCOSIS, DROWSINESS, DIZZINESS. CHRONIC: DERMATITIS.

EMERGENCY AND FIRST AID PROCEDURES

SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP OR MILD DETERGENT.AND WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS. EYES: WASH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES , LIFT-ING LOWER AND UPPER EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY. INHALATION: REMOVE TO FRESH AIR , IF NOT BREATHING , GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFFICULT, GIVE OXYGEN. CALL A PHYSICIAN: INGESTION: IF SWALLOWED , INDUCE VOMITING IMMEDIATELY AFTER GIVING TWO GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PHYSICIAN IMMEDIATELY.

SECTION VI REACTIVITY DATA

STABILITY CONDITIONS TO AVOID

STABLE X UNSTABLE AVOID HEAT AND IGNITION SOURCES.
INCOMPATIBILITY STRONG OXIDIZER, ALUMINUM, PERCHLORIC

(MATERIALS TO AVOID) ACID , ETHYLENE OXIDE.

HAZARDOUS DECOMPOSITION PRODUCTS CARBON OXIDES.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

MAY OCCUR WILL NOT OCCUR X NONE

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

VENTILATE AREA OF LEAK OR SPILL. REMOVE ALL SOURCES OF IGNITION. CLEAN UP PERSONNEL REQUIRE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION FROM VAPORS. SMALL SPILLS MAY BE ABSORBED ON PAPER TOWELS AND EVAPORATED IN FUME HOOD. ALLOW ENOUGH TIME FOR FUMES TO CLEAR HOOD, THEN IGNITE PAPER IN A SUITABLE LOCATION AWAY FROM COMBUSTIBLE MATERIALS. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE. WASTE DISPOSAL METHOD

DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO FEDERAL ,STATE OR LOCAL LAWS. THESE DISPOSAL GUIDELINES ARE INTENDED FOR THE DISPOSAL OF CATALOG-SIZE QUANTITIES ONLY. CAN BE LIQUID INCINERATED IN RCRA APPROVED COMBUSTION CHAMBER OR ABSORBED WITH VERMICULITE, DRY SAND, EARTH OR SIMILAR MATERIALS. SCOOP UP WITH NON-SPARKING TOOLS AND PLACE IN CLOSED CONTAINER, AND DISPOSE IN A RCRA APPROVED FACILITY. DO NOT FLUSH TO SEWER.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATION ORGANIC CARTRIDGE.

(SPECIFY TYPE)

VENTILATION LOCAL EXHAUST X SPECIAL ----

MECHANICAL (GENERAL) X OTHER ---PROTECTIVE GLOVES POLY OR RUBBER EYE PROTECTION GOGGLES

OTHER PROTECTIVE EQUIPMENT LAB COAT

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING KEEP CONTAINER TIGHTLY

CLOSED WHEN NOT IN USE. STORE IN COOL, WELL VENTILATED PLACE.

OTHER PRECAUTIONS READ LABEL ON CONTAINER BEFORE USING. DO NOT WEAR CONTACT LENSES WHEN WORKING WITH CHEMICALS. CONDITIONS AGGRAVATED/TARGET ORGANS: PERSONS WITH PRE-EXISTING SKIN, EYE, RESPIRATORY DISORDERS MAY BE MORE SUSCEPTIBLE. APPROVED BY STEVEN C. QUANDT EFFECTIVE DATE 12/14/94 FOR LABORATORY USE ONLY. NOT FOR DRUG, FOOD OR HOUSEHOLD USE. KEEP OUT OF REACH OF CHILDREN. THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND. EMPLOYERS SHOULD USE THIS INFORMATION ONLY AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM AND MUST MAKE INDEPENDENT DETERMINATION OF SUITABILITY AND COMPLETENESS OF INFORMATION FROM ALL SOURCES TO ASSURE PROPER USE OF THESE MATERIALS AND THE SAFETY AND HEALTH OF EMPLOYEES.