1 - PRODUCT IDENTIFICATION

PRODUCT NAME: ISOPROPYL ALCOHOL

FORMULA:

CH3CHOHCH3

FORMULA WT:

60.10

CAS NO.:

67-63-0

NIOSH/RTECS NO.: NT805000

COMMON SYNONYMS: 2-PROPANOL; ISOPROPANOL; SEC-PROPYL ALCOHOL; IPA;

DIMETHYLCARBINOL

PRODUCT CODES: U298,5082,9080

EFFECTIVE: 09/03/86

REVISION #02

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA (TM) SYSTEM

HEALTH

- 1 SLIGHT

FLAMMABILITY - 3 SEVERE (FLAMMABLE)

REACTIVITY

- 1 SLIGHT

CONTACT

- 1 SLIGHT

HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).

LABORATORY PROTECTIVE EQUIPMENT

SAFETY GLASSES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER

ECAUTIONARY LABEL STATEMENTS

WARNING

FLAMMABLE

CAUSES IRRITATION HARMFUL IF SWALLOWED OR INHALED

KEEP AWAY FROM HEAT, SPARKS, FLAME . AVOID CONTACT WITH EYES, SKIN, CLOTHING. AVOID BREATHING VAPOR. KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. IN CASE OF FIRE, USE ALCOHOL FOAM, DRY CHEMICAL, CARBON DIOXIDE - WATER MAY BE INEFFECTIVE. FLUSH SPILL AREA WITH WATER SPRAY.

SAF-T-DATA (TM) STORAGE COLOR CODE: RED (FLAMMABLE)

2 - HAZARDOUS COMPONENTS

COMPONENT

CAS NO.

ISOPROPYL ALCOHOL

90-100

67-63-0

3 - PHYSICAL DATA \_\_\_\_\_

JILING POINT:

82 C ( 180 F)

VAPOR PRESSURE (MM HG): 33

MELTING POINT:

-89 C ( -128 F)

VAPOR DENSITY (AIR=1): 2.1

SPECIFIC GRAVITY: 0.79

EVAPORATION RATE:

2.83

SOLUBILITY (H2O): COMPLETE (IN ALL PROPORTIONS) % VOLATILES BY VOLUME: 100

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APPEARANCE & ODOR: COLORLESS LIQUID WITH SLIGHT ODOR OF RUBBING ALCOHOL.

### 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP 12 C ( 53 F) NFPA 704M RATING: 1-3-0

FLAMMABLE LIMITS: UPPER - 12.0 % LOWER - 2.0 %

#### FIRE EXTINGUISHING MEDIA

USE ALCOHOL FOAM, DRY CHEMICAL OR CARBON DIOXIDE. (WATER MAY BE INEFFECTIVE.)

## SPECIAL FIRE-FIGHTING PROCEDURES

FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE. MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL.

### UNUSUAL FIRE & EXPLOSION HAZARDS

VAPORS MAY FLOW ALONG SURFACES TO DISTANT IGNITION SOURCES AND FLASH BACK. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE.

# TOXIC GASES PRODUCED

CARBON MONOXIDE, CARBON DIOXIDE

# 5 - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV/TWA): 980 MG/M3 ( 400 PPM)

SHORT-TERM EXPOSURE LIMIT (STEL): 1225 MG/M3 ( 500 PPM)

PERMISSIBLE EXPOSURE LIMIT (PEL): 980 MG/M3 ( 400 PPM)

TOXICITY: LD50 (ORAL-RAT) (MG/KG) - 5045

LD50 (IPR-MOUSE) (MG/KG) - 933

LD50 (SKN-RABBIT) (G/KG) - 13

LD50 (IV-MOUSE) (MG/KG) - 1863

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO

### EFFECTS OF OVEREXPOSURE

INHALATION OF VAPORS MAY CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, IRRITATION OF RESPIRATORY TRACT, AND LOSS OF CONSCIOUSNESS.

INHALATION OF VAPORS MAY CAUSE PULMONARY EDEMA.

LIQUID MAY BE IRRITATING TO SKIN AND EYES. PROLONGED SKIN CONTACT MAY RESULT IN DERMATITIS. EYE CONTACT MAY RESULT IN TEMPORARY CORNEAL DAMAGE. INGESTION MAY CAUSE NAUSEA, VOMITING, HEADACHES, DIZZINESS,

GASTROINTESTINAL IRRITATION.

INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

#### TARGET ORGANS

EYES, SKIN, RESPIRATORY SYSTEM

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

STANT TORSTOTON

ROUTES OF ENTRY

INHALATION, INGESTION, EYE CONTACT, SKIN CONTACT

EMERGENCY AND FIRST AID PROCEDURES

CALL A PHYSICIAN.

IF SWALLOWED, DO NOT INDUCE VOMITING.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. FLUSH SKIN WITH WATER.

6 - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: HEAT, FLAME, OTHER SOURCES OF IGNITION

INCOMPATIBLES:

STRONG OXIDIZING AGENTS, ALUMINUM, NITRIC ACID,

SULFURIC ACID, AMINES AND AMMONIA, HALOGEN ACIDS AND HALOGEN COMPOUNDS

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DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE WEAR SUITABLE PROTECTIVE CLOTHING. SHUT OFF IGNITION SOURCES; NO FLARES, SMOKING, OR FLAMES IN AREA. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS. TAKE UP WITH SAND OR OTHER NON-COMBUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER DISPOSAL. FLUSH AREA WITH WATER.

J. T. BAKER SOLUSORB(R) SOLVENT ADSORBENT IS RECOMMENDED FOR SPILLS OF THIS PRODUCT.

DISPOSAL PROCEDURE

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER:

D001 (IGNITABLE WASTE)

8 - PROTECTIVE EQUIPMENT

VENTILATION:

USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET

TLV REQUIREMENTS.

RESPIRATORY PROTECTION: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONCENTRATION EXCEEDS TLV. AT CONCENTRATIONS UP TO 1000 PPM, A CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE IS RECOMMENDED. ABOVE THIS LEVEL, A SELF-CONTAINED BREATHING APPARATUS

IS RECOMMENDED.

EYE/SKIN PROTECTION:

SAFETY GOGGLES, UNIFORM, APRON, NEOPRENE GLOVES

ARE RECOMMENDED.

#### 9 - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA (TM) STORAGE COLOR CODE:

RED (FLAMMABLE)

### SPECIAL PRECAUTIONS

BOND AND GROUND CONTAINERS WHEN TRANSFERRING LIQUID. KEEP CONTAINER TIGHTLY CLOSED. STORE IN A COOL, DRY, WELL-VENTILATED, FLAMMABLE LIQUID STORAGE AREA.

10 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

PROPER SHIPPING NAME

ISOPROPANOL

HAZARD CLASS

FLAMMABLE LIQUID

UN/NA

UN1219

LABELS

FLAMMABLE LIQUID

INTERNATIONAL (I.M.O.)

PROPER SHIPPING NAME

ISOPROPANOL

HAZARD CLASS

3.2

UN/NA

UN1219

LABELS

FLAMMABLE LIQUID