SECTION I. Identity of Material

**PRODUCT NAME OR NUMBER**  70% ISOPROPYL ALCOHOL, RUBBING

**SYNONYMS**  ISOPROPYL ALCOHOL

**FORMULA**  CH₃CH(OH)CH₃

**CAS NUMBER**  67-63-0

**MIXTURE**  70%

**CHEMICAL FAMILY**  ALCOHOL


<table>
<thead>
<tr>
<th>NO.</th>
<th>COMPOSITION</th>
<th>CAS NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70% ISOPROPYL ALCOHOL</td>
<td>MIXTURE</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>ISO PROPA NOL</td>
<td>67-63-0</td>
<td>70%</td>
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</tbody>
</table>

THERE ARE NO OTHER LISTED INGREDIENTS CONSIDERED TO BE HAZARDOUS.

SECTION II-B ACUTE TOXICITY DATA

<table>
<thead>
<tr>
<th>NO.</th>
<th>ACUTE ORAL LD₅₀</th>
<th>ACUTE Dermal LD₅₀</th>
<th>ACUTE INHALATION LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5840 MG/KG</td>
<td>13000 MG/KG</td>
<td>12000 MG/KG</td>
</tr>
<tr>
<td></td>
<td>FOR RATS</td>
<td>FOR RABBITS</td>
<td>FOR RATS 8 HRS.</td>
</tr>
</tbody>
</table>

FOR CONCENTRATIONS OF 100%

SECTION III PHYSICAL DATA

| BURNING POINT: | 176°F (DEG F) |
| MELTING POINT: | 127°F (DEG F) |
| SPECIFIC GRAVITY: | 0.878 (H2O = 1) |
| SOLUBILITY: | COMPLETE (IN WATER) |
| VAPOR PRESSURE: | 20°C (MM HG) |
| VAPOR DENSITY: | 1.6 (AIR = 1) |

EVAPORATION RATE IN BUTYL ACETATE = 11.7%

APPEARANCE AND ODOR: CLEAR, COLORLESS LIQUID WITH MILD ALCOHOL ODOR.

SECTION IV FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD: 70.5°F (TAG OPEN CUP)

EXTINGUISHING MEDIA USE WATER FOG, ALCOHOL FOAM, DRY CHEMICAL, CO₂

FLAMMABLE LIMITS % VOLUME IN AIR
  LOWER: 2%  UPPER: 12%

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS WARNING: FLAMMABLE. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES, AND RUBBER BOOTS. INCLUDE A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME SHOULD BE COOLED WITH LARGE AMOUNTS OF WATER.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is furnished free of charge and is based on technical data that CUMBERLAND believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.
### SECTION V HEALTH HAZARD INFORMATION

<table>
<thead>
<tr>
<th>NO.</th>
<th>OSHA PELTWA</th>
<th>PELCEILING</th>
<th>TLVTLWA</th>
<th>ACGIH TLV</th>
<th>TLVESTEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>400 PPM</td>
<td>400 PPM</td>
<td>500 PPM</td>
<td>500 PPM</td>
<td>1225 MG/M</td>
<td>50% ODOR RECOGNITION</td>
</tr>
</tbody>
</table>

**CARCINOGEN:** OSHA-NO, NTP-NO, IARC-NO

**INHALATION:** MAY CAUSE MILD IRRITATION TO THE NOSE, THROAT, AND RESPIRATORY TRACT AND MAY RESULT IN CENTRAL NERVOUS SYSTEM DEPRESSION.

**SKIN CONTACT:** MILDLY IRRITATING TO THE SKIN.

**SKIN ABSORPTION:** MILDLY IRRITATING TO THE SKIN.

**EYE CONTACT:** MODERATELY IRRITATING TO THE EYES.

**INGESTION:** GENERALLY CONSIDERED TO HAVE A LOW ORDER OF ACUTE ORAL TOXICITY.

**ACUTE:**

- ACUTE LOCAL - IRRITANT 1
- ACUTE SYSTEMIC INJECTION 2, INHALATION 2

**CHRONIC:**

- CHRONIC LOCAL NO INFORMATION ON HUMANS CONSIDERED VALID BY AUTHORS.
- CHRONIC SYSTEMIC INJECTION 1 INHALATION 2

### SECTION VI EMERGENCY AND FIRST AID PROCEDURES

**EYES:** IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. OBTAIN IMMEDIATE MEDICAL ATTENTION.

**SKIN:** FLUSH SKIN WITH PLENTY OF WATER. IF IRRITATION OCCURS, SEEK MEDICAL ATTENTION.

**INHALATION:** REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. OBTAIN MEDICAL ATTENTION.

**INGESTION:** DO NOT GIVE LIQUIDS IF VICTIM IS UNCONSCIOUS OR DROWSY. OTHERWISE GIVE NO MORE THAN 2 GLASSES OF WATER AND INDUCE VOMITING BY GIVING 30CC 2 TABLESPOONS SYRUP OF IPECAC. OBTAIN MEDICAL ATTENTION.

**NOTES TO PHYSICIAN:** IF VICTIM IS A CHILD, GIVE NO MORE THAN 1 GLASS OF WATER AND 15CC 1 TABLESPOON SYRUP OF IPECAC. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS, OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE SHOULD BE CONSIDERED FOLLOWING INTUBATION WITH A CUFFED ENDOTRACHEAL TUBE.

### SECTION VII REACTIVITY

**STABILITY:** STABLE

**HAZARDOUS POLYMERIZATION:** WILL NOT OCCUR

**CONDITIONS AND MATERIALS TO AVOID:** AVOID HEAT, SPARKS, FLAME, AND CONTACT WITH OXIDIZING AGENTS. DO NOT STORE OR HANDLE IN ALUMINUM CONTAINERS OR EQUIPMENT AT TEMPERATURES ABOVE 120 F.

**HAZARDOUS DECOMPOSITION PRODUCTS** CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

**NOTE:** TAKEN FROM DANGEROUS PROPERTIES OF HAZARDOUS MATERIALS, 4TH EDITION, N. IRVING SAX
SECTION VIII EMPLOYEE PROTECTION

CONTROL MEASURES: EXPLOSION PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

RESPIRATORY PROTECTION: USE NIOSH APPROVED RESPIRATOR TO PREVENT OVER EXPOSURE. IN ACCORD WITH 29CFR 1910.134 USE EITHER AN ATMOSPHERE SUPPLYING RESPIRATOR OR AN AIR PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

PROTECTIVE CLOTHING: AVOID CONTACT WITH EYES. WEAR CHEMICAL GOGGLES IF THERE IS A LIKELIHOOD OF CONTACT WITH THE EYES. AVOID REPEATED CONTACT WITH THE SKIN. WEAR CHEMICAL RESISTIVE GLOVES.

EYE PROTECTION: AVOID CONTACT WITH THE EYES. WEAR CHEMICAL GOGGLES IF THERE IS A LIKELIHOOD OF CONTACT WITH THE EYES.

SECTION IX ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES: WARNING, FLAMMABLE, ELIMINATE ALL IGNITION SOURCES. HANDLING EQUIPMENT MUST BE PROPERLY GROUNDED TO ELIMINATE SPARKING. FOR LARGE SPILLS, EVACUATE AREA OF ALL UNAUTHORIZED PERSONNEL. PERSONS ENTERING AFFECTED AREA MUST WEAR PERSONAL PROTECTIVE CLOTHING AND EQUIPMENT. SHUT OFF SOURCE OF SUPPLY.

WASTE DISPOSAL: UNDER EPA-RACA 40CFR261.21, PRODUCT BECOMES A WASTE MATERIAL. IT WOULD BE IGNOITABLE AND A HAZARDOUS WASTE. REFER TO EPA OR STATE REGULATIONS FOR DISPOSAL AND CLEANUP DETERMINE REPORTABILITY.

ENVIRONMENTAL HAZARDS: RELEASES TO AIR, LAND, WATER MAY BE REPORTABLE. CIRCUMSTANCES SURROUNDING RELEASE AND CLEANUP DETERMINE REPORTABILITY.

SECTION X SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: USE EXPLOSION PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

RESPIRATORY (SPECIFY IN DETAIL) SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

REFER TO SECTION VIII EMPLOYEE PROTECTION

EYE

REFER TO SECTION VIII EMPLOYEE PROTECTION

GLOVES:

OTHER CLOTHING AND EQUIPMENT: EYE WASH FOUNTAIN AND SAFETY SHOWER SHOULD BE AVAILABLE FOR EMERGENCY USE.

SECTION XI TRANSPORTATION DATA

HAZARDOUS CHARACTERISTICS

☐ CORROSIVE ☐ FLAMMABLE LIQUID ☐ FLAMMABLE SOLIDS ☐ EXPLOSIVES

☐ OXIDIZER ☐ POISON ☐ MAGNETIC ☐ NON-FLAMMABLE GAS

☐ FLAMMABLE GAS ☐ RADIOACTIVE ☐ NONE ☒ OTHER CONSUMER COMMODITY-ORM-D

D.O.T. CLASSIFICATION CONSUMER COMMODITY ORM-D FLASH POINT 70.5 °F

SECTION XII MANUFACTURER OR SUPPLIER DATA

FIRM'S NAME & MAILING ADDRESS

CUMBERLAND-SWAN, INC.
ONE SWAN DRIVE
SMYRNA, TN 37167

NAME (PRINT) JAMES R. BEAVER

SIGNATURE

TITLE RISK MANAGER

DATE 7/10/90

EMERGENCY TELEPHONE NO. 615 459-8900

BE SAFE
READ OUR PRODUCT
SAFETY INFORMATION.