

# MATERIAL SAFETY DATA SHEET

FOR COATINGS RESINS AND RELATED MATERIALS

PRODUCT NAME: Randolph Isopropyl Alcohol  
PRODUCT CODE:  
Class 3, Flammable Liquid, UN1219, PGII

HMS CODES: H-1 F-3 R-0 P  
PRODUCT CLASS: Flammable Liquid

## SECTION I - MANUFACTURER IDENTIFICATION

PREPARED BY: Consolidated Aircraft Coatings  
P.O. Box 3129, Riverside, CA 92519  
STREET ADDRESS: 4343 Fort Drive, Riverside, CA 92509  
EMERGENCY TELEPHONE NO. - Chemtrec (800) 424-9300, Int'l (703) 527-3887 (International Call Collect)  
INFORMATION TELEPHONE NO. - (951) 684-4280 (951) 809-7144 (760) 782-1947

DATE OF PREP: 9/15/08  
NAME OF PREPARER: Greg Albarian

## SECTION II - HAZARDOUS INGREDIENTS/ SARA III INFORMATION

REPORTABLE COMPONENTS	OCCUPATIONAL EXPOSURE LIMITS	WT. %	VAPOR PRESSURE	TOXICITY DATA
Isopropanol*(CAS #67-63-0)	400 PPM	99.0-100.0	33mmHg @68°F	Inhal, Skin, Eye, Ingest

\*This material is subject to the reporting requirements of section 313 of the Emergency Planning and the Community Right-To-Know Acts of 1986 and of 40 CFR 372.

## SECTION III- PHYSICAL DATA

BOILING POINT: 180.0° F (82.2° C) @ 760 mmHg  
VAPOR DENSITY (Air=1): 2.070 (Heavier than air)  
MATERIAL VOC: 6.550 lbs/gal 789.000 gram/ltr  
APPEARANCE AND ODOR: Transparent liquid. Slight Ethanol/Acetone-like odor.

SPECIFIC GRAVITY (H<sub>2</sub>O= 1): .789 @ 60°F  
EVAPORATION RATE: (Ethyl Ether) 7.70  
SOLUBILITY IN WATER: 100%

## SECTION IV- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 53° F (11.7° C)  
FLAMMABLE LIMITS IN AIR BY VOLUME: LOWER: 2.0% UPPER: 12.0%  
EXTINGUISHING MEDIA: Alcohol foam, carbon dioxide, dry chemical.  
SPECIAL FIREFIGHTING PROCEDURES: Water may be ineffective. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full coverage face piece operated in the positive-pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment. Refer to Section VIII Personal Protective Equipment section of this MSDS.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Flammable material.

METHOD USED: TCC

## SECTION V- HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits. Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) low blood pressure, mild, temporary changes in the liver, effects on heart rate, respiratory depression (slowing of the breathing rate), loss of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

INGESTION HEALTH RISK AND SYMPTOMS OF EXPOSURE: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury. Exposure causes severe irritation of the gastrointestinal tract.

HEALTH HAZARDS (ACUTE AND CHRONIC): Breathing isopropanol vapors has caused damage to the lining of the middle ear in experimental animals. The relevance of this finding to humans is uncertain. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects. This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

CARCINOGENICITY: NTP CARCINOGEN: N/A IARC MONOGRAPHS: N/A OSHA REGULATED: N/A

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE TO THIS PRODUCT:** Preexisting eye, skin, heart, central nervous system and respiratory disorders may be aggravated by exposure to this product.

**EMERGENCY AND FIRST AID PROCEDURES:**

**Eyes:** If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin:** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Swallowing:** Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation:** If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Note to Physicians:** This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (i.e., asthma-like conditions), kidney; administration of high doses of isopropanol in combination with known hepatotoxic chemicals resulted in enhanced liver toxicity in experimental animals.

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### **SECTION VI- REACTIVITY DATA**

**STABILITY:** Stable

**CONDITIONS TO AVOID:** Heat and fires. Ignition sources.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Avoid contact with acids, aldehydes, alkalis, amines, chlorinated hydrocarbons, chlorine, ethylene oxide, isocyanates, strong oxidizing agents. Do not use with aluminum equipment at temperatures above 120° F.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS:** May form carbon dioxide and carbon monoxide.

**HAZARDOUS POLYMERIZATION:** Will not undergo hazardous polymerization.

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### **SECTION VII- SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** For a small spill, absorb liquid on vermiculite, floor absorbent or other absorbent material. For a large spill, eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Per good environmental management practices, prevent run-off to sewers, streams or other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

**WASTE DISPOSAL METHOD:** Dispose of in accordance with all applicable local, state and federal regulations. For highway or road spill, contact Chemtrec at (800) 424-9300.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

**Handling:** Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred. Warning: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

**Storage:** Small quantities of peroxides may form on prolonged storage. Exposure to light and/or air significantly increases the rate of peroxide formation. If evaporated to a residue, the mixture of peroxides and isopropanol may explode when exposed to heat or shock.

**OTHER PRECAUTIONS:** Avoid prolonged or repeated contact with skin. Avoid prolonged or repeated breathing of vapor. Keep containers tightly closed. Replace all bungs tightly before shipping or storing. Avoid contact with amines.

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### **SECTION VIII - SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:** If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), 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. Engineering or administrative controls should be implemented to reduce exposure.

**VENTILATION:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

**PROTECTIVE GLOVES:** Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

**EYE PROTECTION:** Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Avoid contact with eyes. Wear eye protection devices. If required, wear chemical resistant gloves and other clothing.

**WORK/ HYGIENIC PRACTICES:** Wash hands with soap and water before eating. Dispose of contaminated clothing as soon as possible.

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### **SECTION IX- DISCLAIMER**

Above information is based on data supplied to us and is believed to be correct. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since the data made available subsequent to the date

hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose. It is the user's obligation to determine the safe use of it.