


## Material Safety Data Sheet

	<b>Red Bird</b>	<b>Health:</b>	<b>2 - Moderate</b>
	<b>S e r v i c e</b>	<b>Fire:</b>	<b>3 - Hazardous</b>
		<b>Reactivity:</b>	<b>0 - Minimal</b>

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MSDS: 99220

Prep Date: 5/26/1999

Product: Isopropanol

Revision: 3

### Section 1 - Chemical Product and Company Identification

**Product Chemical Name:** Raw chemical

**Chemical Formula:** Raw chemical

**CAS No:**

**Manufacturer:** Red Bird Services PO Box 155 205 Western Avenue Osgood IN 47037

**For Emergency, Call Chemtree 24 hours a day....800-424-9300**

**Catalog Number:** 26330, 26835

**Synonym:** Isopropyl alcohol, 2-propanol

### Section 2 - Composition/Information on Ingredients

Ingredients	CAS Number	% wt or N
Impurities	N/A	<1
Isopropanol	67-63-0	ca100

OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
TWA	STEL	TWA	STEL	TWA	STEL	IDLH
980mg/m3	1225mg/m3	983mg/m3	1230mg/m3	984mg/m3	1968mg/m3	2000mg/m3

### Section 3 - Hazard Information

**Primary Entry Route:** Inhalation, digestion, and skin contact

**Target Organs:** Eyes, skin, respiratory system

**Acute Effects:** May cause toxic effects if inhaled or absorbed through skin

**Inhalation:** Irritant

**Eye:** Dangerous

**Skin:** Irritant

**Ingestion:** Irritant to dangerous

**Carcinogenicity:** Not considered to be.

**Medical Conditions:** None listed

**Chronic Effects:** None listed

**Section 4 - First Aid Measures**

**Inhalation:** Move to fresh air, give oxygen if difficulty in breathing. Get medical attention.

**Eye Contact:** Flush with water for at least 15 minutes, including under eyelids. Get medical attention

**Skin Contact:** Flush with water for 15 minutes. If irritation persists, get medical attention.

**Ingestion:** Give water to drink to dilute material. Induce vomiting. Never give anything by mouth to anyone who is unconscious or convulsing. Get medical attention.

**Special Precautions:** NA

**Section 5 - Fire Fighting Measures**

**Flash Point:** 53.42

**Burning Rate:** N/A

**Auto Ignition:** 750.29  
**Temperature**

**LEL:** N/A

**UEL:** N/A

**Flammability**  
**Classification:** 3

**Extinguishing**  
**Media:** Alcohol foam, dry chemicals or carbon dioxide.

**Unusual Fire/Explosion Hazards:** highly flammable

**Hazardous Combustion Products:** None listed

**Instructions:** Do not release runoff from fire control methods, to sewers, or waterways.

**Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (scba) with a full facepiece operated with pressure demand or positive-pressure mode.

**Section 6 - Accidental Release Measures**

**Spill/Leak Procedures:** N/A

**Small Spills:** N/A

**Large Spills:** For containment; dike far ahead of the spill. Cover with dry earth, dry sand, or non-combustible material. Do not release into sewer or waterways.

**Regulatory Requirement:** Follow applicable OSHA regulations (29 CFR 1910.120).

**Section 7 - Handling and Storage****Handling**

**Precautions:** Wear safety glasses, goggles, or face shield, safety gloves, personal protective clothing, or respirator or airlines as required in section 8 in this MSDS.

**Storage**

**Requirements:** Store in closed container, cool, dry, in well-ventilated area, away from source of heat, and incompatible materials.

**Regulatory**

**Requirement:** See section 15 of this MSDS.

**Section 8 - Exposure Controls/ Personal Protection****Engineering**

**Controls:** N/A

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Administrative**

**Controls:** N/A

**Respiratory**

**Protection:** Seek professional advise prior to respirator selection and use, Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH approved respirator. Select respirator based on it's suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels or storage tanks), wear an SCBA. Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Protective Clothing/**

**Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety glasses. Per OSHA eye-and-face-ptotection regulations (29 CFR 1910.133).

**Safety**

**Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated**

**Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Contact lenses are not safety protection; soft lenses absorb and all lenses concentrate exposure. Practice good personal hygiene after use of this material especially before eating, drinking, smoking, using the toilet or applying cosmetics. Never eat, drink, or smoke in work areas.

**Section 9 - Physical and Chemical Properties**

**Physical State:** liquid

**Odor Threshld:** 90 mg/m3

**pH:** NA

**Vapor Press:** 33mm@20 C

**Boiling Point:** 189.59

**Vapor Density:** 2.06

**Freezing/ Melting Point:** NA

**Formula Weight:** N/A

**Viscosity:** N/A

**Density:** 0.785mg/m3**Refract Index:** N/A**Spec Gravity:** 0.7859@20 C**Surface Tension:** N/A**% Volatile:** NA**Appearance****Odor:** Clear liquid with a alcohol odor.**Evaporation****Rate:** NA**Water****Solubility:** completeN/A**Section 10 - Stability and Reactivity****Stability:** Stable**Polymerization:** Cannot not occur**Chemical****Incompatibilities:** avoid strong oxidizers, and nitric or sulfuric acid**Conditions to Avoid:** Incompatabilities**Hazardous****Decomposition****Products:** carbon oxides**Section 11 - Toxicological Information****Eye Effect:** Irritation**Skin Effect:** Irritation**Acute****Inhalation****Effects:** Irritation to dangerous or toxic**Acute Oral****Effects:** Irritation to extremely dangerous. Rat,oral, LD50: 5840mg/kg**Chronic Effects:** See section 3 in this MSDS.**Carcinogenicity:** NTP and IARC listed. We believe this to be the manufacturing process and not necessarily the product.**Mutagenicity:** Rat-ihl 1030ug/m3**Teratogenicity:** Not listed**Section 12 - Ecological Information****Ecotoxicity:** N/A**Environmental****Fate:** N/A

**Environmental**  
**Transport:** N/A

**Environmental**  
**Degradation:** N/A

**Soil**  
**Absorption**  
**Mobility:** N/A

**Section 13 - Disposal Considerations**

**Disposal:** See section 6 of this MSDS

**Disposal**  
**Regulatory**  
**Requirements:** See section 15 of this MSDS.

**Container**  
**Cleaning and**  
**Disposal:** N/A

**Section 14 - Transport Information**

**Shipping Name:** Isopropanol

**Shipping Symbol:** N/A

**Hazard Class:** 3

**Id No:** UN1219

**Packing Group:** II

**Label:** Flammable

**Special Provision:** N/A

**Packaging**  
**Exceptions:** N/A

**Nn-Blk Packaging:** N/A

**Bulk Packaging:** N/A

*Quantity Limitations:*

**Passenger, Air, or Rail:** 1 L

**Cargo Aircraft Only:** 60L

*Vessel Stowage Requirements:*

**Vessel Stowage:** B

**Other:** 40

**Section 15 - Regulatory Information**

EPA Regulation: listed

RCRA hazardous waste number: Not listed (40 CFR 261.33) listed

RCRA hazardous Waste classification: (40 CFR 261.??): classified.

CERCLA hazardous Substance (40 CFR 302.4): not listed specific peer RCRA, Sec 3001; CWA, Sec 311 (b)(4); CWA,,Sec 307(a), listed

CAA:

CERCLA Reportable Quality (RQ): listed

SARA 311/312 Codes: listed

SARA Toxic Chemical (40 CFR 372.65): listed

SARA EHS (Extremely hazardous substance)(40 CFR 355): listed, Threshold Planning Quality (TPQ) Listed

OSHA Regulations: listed

Air contaminant (29 CFR 1910.1000, Table Z-1-A):

OSHA Specifically Regulated Substance(29 CFR 1910.1000): listed

State Regulations: STCC Listed,

DOT(40 CFR 172.101 Append.): listed

ACGIH Threshold Limit Value: listed

MAK: listed

TSCA: listed

ANNEX I: listed

***Section 16 - Other Information***

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