



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	3	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	2							
Fire Hazard	3							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Alcohol, Anhydrous, Completely Denatured</b>	<b>Catalog Number(s).</b> A1038 <b>CAS#</b> Mixture. <b>RTECS</b> Not applicable. <b>TSCA</b> TSCA 8(b) inventory: Ethyl alcohol 200 Proof; Isopropyl alcohol; Methyl isobutyl ketone <b>CI#</b> Not applicable.
<b>Manufacturer</b>	SPECTRUM QUALITY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>IN CASE OF EMERGENCY</b> <a href="tel:800-424-9300">CHEMTREC (24hr) 800-424-9300</a>  CALL (310) 516-8000
<b>Commercial Name(s)</b>	Not available.	
<b>Synonym</b>	Not available.	
<b>Chemical Name</b>	Not applicable.	
<b>Chemical Family</b>	Aliphatic alcohol or glycol. (Solvent.)	
<b>Chemical Formula</b>	Not applicable.	
<b>Supplier</b>	SPECTRUM QUALITY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Ethyl alcohol 200 Proof	64-17-5	1900			89
2) Isopropyl alcohol	67-63-0	980	1230		10
3) Methyl isobutyl ketone	108-10-1	205	300	125	1
<b>Toxicological Data on Ingredients</b>					
<b>Ethyl alcohol 200 Proof:</b> ORAL (LD50): Acute: 7060 mg/kg [Rat.]. <b>Isopropyl alcohol:</b> ORAL (LD50): Acute: 5045 mg/kg [Rat]. 3600 mg/kg [Mouse]. 6410 mg/kg [Rabbit]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit]. <b>Methyl isobutyl ketone:</b> ORAL (LD50): Acute: 1600 mg/kg [Guinea pig]. 2671 mg/kg [Mouse]. 2080 mg/kg [Rat]. DERMAL (LD50): Acute: 20001 mg/kg [Rabbit].					

**Section 3. Hazards Identification**

<b>Potential Acute Health Effects</b>	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (permeator), of inhalation.
<b>Potential Chronic Health Effects</b>	<p><b>CARCINOGENIC EFFECTS:</b> Classified 3 (Not classifiable for human.) by IARC [Isopropyl alcohol].</p> <p><b>MUTAGENIC EFFECTS:</b> Not available.</p> <p><b>TERATOGENIC EFFECTS:</b> Not available.</p> <p><b>DEVELOPMENTAL TOXICITY:</b> Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Development toxin [POSSIBLE] [Isopropyl alcohol].</p> <p>The substance is toxic to kidneys, lungs, the nervous system, the reproductive system, mucous membranes, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.</p>

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Flammable.
<b>Auto-Ignition Temperature</b>	The lowest known value is 399°C (750.2°F) (Isopropyl alcohol).
<b>Flash Points</b>	The lowest known value is CLOSED CUP: 11.67°C (53°F). (TAG). OPEN CUP: 18.3°C (64.9°F). (Cleveland). (Isopropyl alcohol)
<b>Flammable Limits</b>	The greatest known range is LOWER: 3.3% UPPER: 19% (Ethyl alcohol 200 Proof)
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards in Presence of Various Substances</b>	Extremely flammable in presence of open flames and sparks. Flammable in presence of heat. Slightly flammable to flammable in presence of oxidizing materials.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.
<b>Special Remarks on Fire Hazards</b>	Containers should be grounded. <b>CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME</b> Vapor may travel considerable distance to source of ignition and flash back. (Ethyl alcohol 200 Proof)

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**Special Remarks on Explosion Hazards** Not available.

**Section 6. Accidental Release Measures**

**Small Spill** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large Spill** Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

**Precautions** Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

**Storage** Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection** Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**  
**Ethyl alcohol 200 Proof**  
 TWA: 1000 from OSHA (PEL) [United States]  
 TWA: 1900 from OSHA (PEL) [United States]  
**Isopropyl alcohol**  
 TWA: 400 STEL: 500 from ACGIH (TLV) [United States] [1995]  
 TWA: 980 STEL: 1230 from ACGIH (TLV) [United States] [1995]  
 TWA: 400 (ppm) [United Kingdom (UK)]  
**Methyl isobutyl ketone**  
 TWA: 50 STEL: 75 CEIL: 125 from ACGIH (TLV) [United States] [1995]  
 TWA: 205 STEL: 300 CEIL: 510 from ACGIH (TLV) [United States] [1995]

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Liquid.	<b>Odor</b>	Pungent,fruity. (Strong.)
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	7 [Neutral.]	<b>Color</b>	Clear Colorless.
<b>Boiling Point</b>	The lowest known value is 78.5°C (173.3°F) (Ethyl alcohol 200 Proof). Weighted average: 79.25°C (174.7°F)		
<b>Melting Point</b>	May start to solidify at -84°C (-119.2°F) based on data for: Methyl isobutyl ketone. Weighted average: -111.34°C (-168.4°F)		
<b>Critical Temperature</b>	The lowest known value is 235°C (455°F) (Isopropyl alcohol).		
<b>Specific Gravity</b>	Weighted average: 0.79 (Water = 1)		
<b>Vapor Pressure</b>	The highest known value is 5.7 kPa (@ 20°C) (Ethyl alcohol 200 Proof). Weighted average: 5.53 kPa (@ 20°C)		
<b>Vapor Density</b>	The highest known value is 3.45 (Air = 1) (Methyl isobutyl ketone). Weighted average: 1.66 (Air = 1)		

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<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The highest known value is 43 ppm (Isopropyl alcohol) Weighted average: 39.1 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is equally soluble in oil and water.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	See solubility in water, methanol, diethyl ether, n-octanol, acetone.
<b>Solubility</b>	Easily soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Highly reactive with oxidizing agents.
<b>Corrosivity</b>	Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity</b>	Forms explosive peroxides on prolonged storage. (Methyl isobutyl ketone)
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 1600 mg/kg [Guinea pig]. (Methyl isobutyl ketone). Acute dermal toxicity (LD50): 12800 mg/kg [Rabbit]. (Isopropyl alcohol).
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified 3 (Not classifiable for human.) by IARC [Isopropyl alcohol]. <b>DEVELOPMENTAL TOXICITY:</b> Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Development toxin [POSSIBLE] [Isopropyl alcohol].
<b>Other Toxic Effects on Humans</b>	Hazardous in case of skin contact (irritant), of ingestion. Slightly hazardous in case of skin contact (permeator), of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Detected in maternal milk in human. (Isopropyl alcohol)
<b>Special Remarks on other Toxic Effects on Humans</b>	Moderately toxic and narcotic in high concentrations. Experimentally tumorigen. (Ethyl alcohol 200 Proof)

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are less toxic than the product itself.

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**Special Remarks on the Products of Biodegradation** Not available.

**Section 13. Disposal Considerations**

**Waste Disposal**

**Section 14. Transport Information**

**DOT Classification** CLASS 3: Flammable liquid.

**Identification** : Denatured Alcohol (Ethyl alcohol 200 Proof) UNNA: NA1987 PG: II

**Special Provisions for Transport** Not available.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Ethyl alcohol 200 Proof  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethyl alcohol 200 Proof  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethyl alcohol 200 Proof  
 Rhode Island RTK hazardous substances: Isopropyl alcohol  
 Pennsylvania RTK: Ethyl alcohol 200 Proof; Isopropyl alcohol; Methyl isobutyl ketone  
 Florida: Isopropyl alcohol  
 Minnesota: Isopropyl alcohol  
 Massachusetts RTK: Ethyl alcohol 200 Proof; Isopropyl alcohol; Methyl isobutyl ketone  
 New Jersey: Isopropyl alcohol  
 TSCA 8(b) inventory: Ethyl alcohol 200 Proof; Isopropyl alcohol; Methyl isobutyl ketone  
 TSCA 8(a) PAIR: Isopropyl alcohol  
 TSCA 8(d) H and S data reporting: Isopropyl alcohol: 12/15/86  
 TSCA 12(b) one time export: Isopropyl alcohol  
 SARA 313 toxic chemical notification and release reporting: Isopropyl alcohol 10%; Methyl isobutyl ketone 1%  
 CERCLA: Hazardous substances.: Methyl isobutyl ketone;

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Ethyl alcohol 200 Proof  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethyl alcohol 200 Proof

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications**

**WHMIS (Canada)** CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  
 CLASS D-2A: Material causing other toxic effects (VERY TOXIC).  
**DSCL (EEC)** R11- Highly flammable.  
 R20- Harmful by inhalation.  
 R36/38- Irritating to eyes and skin.  
 R60- May impair fertility.

**HMIS (U.S.A.)**

Health Hazard	2
Fire Hazard	3
Reactivity	0
Personal Protection	h

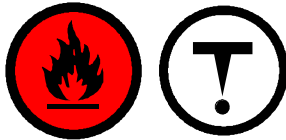
**National Fire Protection Association (U.S.A.)**

Health  Flammability **3**

Reactivity **0**

Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



**ADR (Europe) (Pictograms)**



**Protective Equipment**



Gloves.



Lab coat.



Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

**Section 16. Other Information****MSDS Code**            **A3400****References**            Not available.**Other Special  
Considerations**        Not available.

Validated by Sonia Owen on 2/5/2002.

Verified by Sonia Owen.

Printed 2/5/2002.

**CALL (310) 516-8000****Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*