

**Material Safety Data Sheet**

Chemical Waste Management Company - Azusa Facility  
(Formerly Oil and Solvent Process Company - OSCO Azusa)

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Section I-Product Identification		24 HR. EMERGENCY ASSISTANCE	
<b>PRODUCT NAME:</b>	Normal Butyl Alcohol	Poison Control Center.....(213) 484-5151	
<b>CHEMICAL SYNONYMS:</b>	1-Butanol	Rocky Mt. Poison Center .....1-800-332-3073	
<b>CHEMICAL FAMILY:</b>	Alcohol	Chemtrec .....1-800-424-9300	
<b>OSCO CODE:</b>	N-8005	NFFPA	
<b>THIS PRODUCT IS:</b>	A [X] HAZARDOUS A [ ] HAZARDOUS SUBSTANCE MIXTURE	HAZARD RATING	HLTH= 3
		LEAST SLIGHT	FLAM= 3
		0 ➤ 1 ➤	REAC= 0
		MODERATE HIGH EXTREME 2 ➤ 3 ➤ 4	

**Section II-Hazardous Ingredients**

NAME	C.A.S NUMBER	VOL. %	A.C.G.I.H., TLV UNITS IN ppm		California OSHA			Federal OSHA		
					PERMISSIBLE EXPOSURE LIMITS in ppm					
			TWA	STEL	TWA	STEL	CEIL.	TWA	STEL	CEIL.
n-Butyl Alcohol	71-36-3	100	50 ceiling	N/E	50	N/E	50	100	N/E	N/E

\*This product in part or whole, is subject to the reporting requirements of section 313 of SARA title III.

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**Section III-Physical Properties**

<b>BOILING POINT</b> <sup>°F</sup>	244	<b>PH</b>	<b>Nearly Neutral</b>	<b>APPEARANCE, COLOR, ODOR, ETC.</b> Clear, colorless liquid
<b>VAPOR PRESSURE</b> (mm Hg @ °F)	4.4 @ 68	<b>SPECIFIC GRAVITY</b> (H <sup>2</sup> O = 1) @60°F	<b>0.814</b>	<b>VOC = 814 gm/L</b>
<b>VAPOR DENSITY</b> (air = 1)	2.6	<b>PERCENT VOLATILE BY VOLUME (%)</b>	<b>100</b>	Heavier than air. See Section VIII.
<b>SOLUBILITY IN WATER</b> % BY WEIGHT	7.7	<b>EVAPORATION</b> (N Bu Ace = 1)	<b>0.43</b>	

### Section IV-Fire Protection Information

<b>FLASH POINT</b> (Test Method) °F TCC	98	<b>Flammable Limits</b> (by volume in air)	<b>Lower Limit</b>	1.4%	<b>Upper Limit</b>	11.2%
<b>AUTOIGNITION TEMPERATURE</b> °F	670	<b>Extinguishing Media</b>	Mechanical Foam, Dry Chemical or carbon dioxide.			
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	Self-contained breathing equipment should be used in confined areas where the solvent is used or stored. A straight water stream would spread hydrocarbon fires.					
<b>UNUSUAL FIRE OR EXPLOSIVE HAZARD</b>	A vapor accumulation would flash and/or explode if ignited. Incomplete combustion will produce carbon monoxide and other toxic substances. See Section VIII.					

### Section V-Reactivity Data

<b>STABILITY</b> (Thermal, Light, etc.)	<b>Stable</b>	<b>X</b>	<b>Conditions to Avoid</b>	Open flames, hot surfaces, electrical arcs or any ignition sources.
	<b>Unstable</b>			
<b>INCOMPATIBILITY</b> (Materials to Avoid)	Strong Oxidizing Agents.			
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	<u>Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.</u>			
<b>HAZARDOUS POLYMERIZATION</b>	<b>May Occur</b>			
	<b>Will Not Occur</b>	<b>X</b>		
<b>OTHER</b>				

## Section VI-Environmental Protection

<b>PRECAUTIONS IF MATERIAL IS RELEASED OR SPILLED</b>	Spills should be contained immediately. Large spills should be removed by vacuum truck. Smaller spills may be soaked up with absorbent materials, placed in closed containers, labeled, stored, and disposed of properly. Persons performing this work must wear adequate personal protective equipment and clothing.
<b>RECYCLABLE SOLVENTS</b>	PROTECT THE ENVIRONMENT, DO NOT WASTE THIS SOLVENT. IT IS RECYCLABLE. CALL CWM-AZUSA FACILITY (818) 334-5117.
<b>DISPOSAL OF NON-RECYCLABLE SOLVENTS</b>	Please call the telephone numbers listed above. CWM-Azusa Facility may be able to recycle this waste solvent or suggest a viable alternative. Disposal should be conducted in accordance with all Federal, State, and Local Health and Pollution Regulations.

## Section VII-Handling and Storage Precautions

<b>PRODUCT LABEL</b>	Read and observe all precautions on product label. Keep out of reach of children.
<b>EMPTY CONTAINER</b>	Since emptied containers retain product residues (vapor and liquid), all labeled precautions must be observed. Tighten bungs.
<b>DIRTY SOLVENT</b>	Store in accordance with all applicable regulations. Tighten bungs and store in a cool area.
<b>OTHER</b>	Handle waste observe all precautions on product label. Keep out of reach of children.

## Section VIII-Special Protection Information

<b>EYE PROTECTION</b>	Avoid eye contact with this material. Both Chemical safety goggles and a plastic face shield should be worn when there is danger of splashing. Spectacle-type glasses do not provide satisfactory protection.
<b>RESPIRATORY PROTECTION</b>	Whenever the vapor or mist concentrate is greater than applicable standards, use a NIOSH or MSHA approved respirator.
<b>SKIN PROTECTION</b>	Avoid prolonged or repeated skin contact with this material. Wear protective clothing and solvent-resistant gloves.
<b>VENTILATION</b>	Use adequate ventilation to keep the vapor or mist concentration of this material below applicable standards. Vapors may collect and concentrate in low areas near the ground, and displace the air. Air currents may cause these vapors to travel to ignition sources distant from the handling site, resulting in a flash fire.

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## Section IX-Special Precautions

Eye bath and safety shower must be provided in all work areas where this solvent is used or handled.

**AGGRAVATED MEDICAL CONDITIONS:** Preexisting eye, skin, respiratory or other medical disorders could be aggravated by this product. Consult a physician if preexisting symptoms are aggravated by the use of this product.

### Section X-Emergency and First Aid Procedures

<b>EYE CONTACT</b>	Immediately flush eyes with fresh water for at least 15 minutes. Get medical attention immediately.
<b>SKIN CONTACT</b>	Wash contaminated areas with soap and water. Remove contaminated clothing and footwear. Wash clothing before re-use. Discard footwear which cannot be decontaminated. Medical attention may be required.
<b>INHALATION</b>	Remove patient to fresh air. If breathing stops, give artificial respiration, preferably mouth-to-mouth. Oxygen may be used if available. Get medical attention immediately.
<b>INGESTION</b>	Get medical attention immediately. Do not induce vomiting.

### Section XI-Additional Information

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### Section XII-Toxicity Information: (Including the Acute and Chronic Health Effects.)

REFER TO SECTION II FOR APPLICABLE THRESHOLD LIMIT VALUES (TLV) WHICH ARE THOSE ESTABLISHED BY THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS.

**ACUTE HEALTH EFFECTS AND ROUTES OF POTENTIAL ENTRY, SYMPTOMS OF OVEREXPOSURE:**

- 1. INHALATION:** Respiratory Tract irritation and central nervous system depression with symptoms of headaches, dizziness, nausea, unconsciousness and even death in extreme cases.
- 2. SKIN:** Drying and irritation.
- 3. EYES:** Severe irritation.
- 4. INGESTION:** Gastrointestinal tract irritation, nausea, vomiting and diarrhea. Possible chemical pneumonia if liquid is aspirated into lungs.

**CHRONIC HEALTH EFFECTS:**

Prolonged or repeated skin contact may cause dermatitis and skin defatting. Chronic overexposure may result in central nervous system effects.

**Section XIII-Shipping Information DOT/AQMD Rule 443**

<b>PROPER SHIPPING NAME</b> (Consult CFR 49 for more shipping information)	Butanol, 3, UN 1120, P.G. II
<b>DOT CLASSIFICATION</b> 3	<input type="checkbox"/> <b>PHOTOCHEMICALLY REACTIVE</b>
<b>DOT LABELS REQUIRED</b> Flammable Liquid	<input type="checkbox"/> <b>NON-PHOTOCHEMICALLY REACTIVE MORE THAN 4%</b>
<b>PLACARDS REQUIRED</b> Flammable	<input checked="" type="checkbox"/> <b>NON-PHOTOCHEMICALLY REACTIVE LESS THAN 4%</b>

All information appearing herein concerning our product is based upon tests and data believed to be reliable; however, it is the user's responsibility to determine the safety, toxicity, and suitability of the product for his own use. Since the actual use by others is beyond our control, no guarantee expressed or implied, is made by CWM-Azusa Facility as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does CWM assume any liability arising out of use by others, of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary when particular conditions exist or because of applicable laws or government regulations.