

## Safety & Health Quick List

Chemical/ Product Name:	Butanol
Synonym:	

CAS No: 71-36-3

Hazard Statements: Flammable liquid and vapor.  
 Harmful if swallowed.  
 Causes skin irritation.  
 Causes serious eye damage.  
 May cause respiratory irritation.  
 May cause drowsiness or dizziness.

NFPA Ratings:	4-Dangerous	3-Severe	2-Moderate	1-Slightly Hazardous
GHS Ratings:	1-Dangerous	2-Severe	3-Moderate	4-Slightly Hazardous

**Physical Properties:**

NFPA Rating: Health	2
NFPA Rating: Flammability	3
NFPA Rating: Reactivity	0
GHS Rating: Flammability	2
GHS Rating: Corrosive	1

Auto Ignition Temperature	649.4 F
Solubility in Water	66 g/l
Specific Gravity	0.8098
Flash Point	96.8 F
Vapor Pressure (@ 64F)	0.1059 psi

Fire Extinguisher Type

Water Spray, Alcohol Resistant  
 Foam, Dry Chemical or Carbon  
 Dioxide

Max Concentration (@ 64F)	99.80%
Boiling Point	244.4 F
RQ	5000 lbs

Freeze Point	-128.2
LEL%	1.40%
UEL%	11.20%
Vapor Density	2.6

**Exposure Guidelines**

PEL/TLV	100 ppm
STEL	N/A
Ceiling	N/A
Skin Notation (S)	N/A
Carcinogen (A1-A4)	N/A

Corrosive	1
Irritant	N/A
IDLH	N/A
Odor Threshold	0.83 ppm
Sensitizer	N/A

**Other Hazards:**

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**Emergency Response**

Spill or leak	Isolate for at least 50 meters (150 ft) in all directions
Large Spill	Initial downwind evacuation for at least 300 meters (1000 ft)
Fire	Isolate for 800 meters (1/2 mile) in all directions
Monitoring Method	N/A

**Normal Tasks**

Sampling  
 Drum/Tote Filling  
 Strapping Tank/Truck  
 Hose Disconnect Unclear (Camlock Fitting)  
 Hose Disconnect Unclear (Dry Disconnect)  
 Line/Equipment Operating Unclear  
 Line/Equipment Operating Clear  
 Contaminated Equipment in Maintenance Shop which can't be cleaned  
 Tank Cleaning ( No Chemicals Present)  
 Tank Cleaning (Chemicals Present)

**PPE Group**

Group 5
Group 5
Group 5
Group 5
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**Emergency Response Tasks**

Small Spill  
 Medium Spill  
 Large Spill  
 Downwind Monitoring (Vapor Only)  
 Liquid Contact (HAZMAT)

**PPE Group**

Group 5
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Group 5
Group 5

**Lab Handling**

Inside Hood  
 Outside Hood

**PPE Group**

Group 13
Group 13

NUMBER	KEY CODE	DESCRIPTION
<b>GROUP 2</b>	GENERAL PROCESS AREA	Standard PPE - Hard Hat, Nomex Coveralls, Safety Side-Shield Glasses, Work Gloves (Leather)
<b>GROUP 5</b>	SPLASH GOGGLES RESPIRATOR	Standard PPE (Group 2) with Chemical Gloves, Face Shield, Splash Goggles and the Required Respirator
<b>GROUP 11</b>	STANDARD LAB -L	Nomex Lab Coat, Safety Side-Shield Glasses, Latex Gloves
<b>GROUP 12</b>	STANDARD LAB - N	Nomex Lab Coat, Safety Side-Shield Glasses, Nitrile Gloves
<b>GROUP 13</b>	LAB & RESPIRATOR	Group 11 or 12 along with a Cartridge Respirator
<b>Respirator Type</b>	Full Face, Organic Vapor, Cartridge life= 8 hours	
<b>Chemical Glove Type</b>	Rubber	

**PPE Example**



