

Common Name: **n-BUTYL ALCOHOL**

Synonyms: 1-Butanol, Propyl Carbinol

CAS No: 71-36-3

Molecular Formula: C<sub>4</sub>H<sub>10</sub>O

RTK Substance No: 1330

Description: Colorless liquid with a strong, sweet alcohol odor

**HAZARD DATA**

Hazard Rating	Firefighting	Reactivity
<p><b>2 - Health</b></p> <p><b>3 - Fire</b></p> <p><b>0 - Reactivity</b></p> <p>DOT#: UN 1120</p> <p>ERG Guide #: 129</p> <p>Hazard Class: 3 (Flammable)</p>	<p><b>n-Butyl Alcohol</b> is a FLAMMABLE LIQUID. Use dry chemical, CO<sub>2</sub>, alcohol-resistant foam or other foaming agent as extinguishing agents, as water may not be effective in fighting fires.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE.</p> <p>CONTAINERS MAY EXPLODE IN FIRE.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p>Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source.</p>	<p><b>n-Butyl Alcohol</b> will react with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ALKALI METALS (such as LITHIUM, SODIUM and POTASSIUM); and ALKALINE EARTH METALS (such as BERYLLIUM, MAGNESIUM and CALCIUM) to form flammable and explosive <i>Hydrogen gas</i>.</p> <p><b>n-Butyl Alcohol</b> is not compatible with STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES); ALIPHATIC AMINES; ISOCYANATES; ACETALDEHYDE; and ETHYLENE OXIDE.</p>

**SPILL/LEAKS**

**Isolation Distance:**

Spill: 50 to 100 meters (160 to 330 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and deposit in sealed containers.

Use only non-sparking tools and equipment, especially when opening and closing containers.

Keep **n-Butyl Alcohol** out of confined spaces, such as sewers, because of the possibility of an explosion.

**n-Butyl Alcohol** is readily biodegradable.

**PHYSICAL PROPERTIES**

<b>Odor Threshold:</b>	1 to 15 ppm
<b>Flash Point:</b>	98°F (37°C)
<b>LEL:</b>	1.4%
<b>UEL:</b>	11.2%
<b>Ignition Temp:</b>	650°F (343°C)
<b>Vapor Density:</b>	2.6 (air = 1)
<b>Vapor Pressure:</b>	6 mm Hg at 68°F (20°C)
<b>Specific Gravity:</b>	0.81 (water = 1)
<b>Water Solubility:</b>	Soluble
<b>Boiling Point:</b>	243°F (117°C)
<b>Ionization Potential:</b>	10.04 eV
<b>Molecular Weight:</b>	74.1

**EXPOSURE LIMITS**

**OSHA:** 100 ppm, 8-hr TWA

**NIOSH:** 50 ppm, Ceiling

**ACGIH:** 20 ppm, Ceiling

**IDLH LEVEL:** 1,400 ppm

**PROTECTIVE EQUIPMENT**

<b>Gloves:</b>	Butyl, Nitrile, Neoprene and Viton (>8-hr breakthrough)
<b>Coveralls:</b>	DuPont Tychem® CPF 2, SL, CPF 3, BR, LV, Responder® and TK; Kappler Zytron® 300; Saint-Gobain ONESuit®/TEC or equivalent (>8-hr breakthrough)
<b>Respirator:</b>	>20 ppm - full-facepiece APR with Organic Vapor cartridges >200 ppm - Supplied air

**HEALTH EFFECTS**

**Eyes:** Irritation, burns, tearing, eye damage

**Skin:** Irritation, burns, redness, drying and cracking of the skin

**Inhalation:** Nose, throat and lung irritation with coughing, wheezing and/or shortness of breath

Headache, dizziness, lightheadedness and passing out

**FIRST AID AND DECONTAMINATION**

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention.

**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of water.

**Begin** artificial respiration if breathing has stopped and CPR if necessary.

**Transfer** to a medical facility.