



PRODUCT SPECIFICATION SHEET

N-BUTANOL

REAGENT ACS GRADE

Catalog No: 331000ACS

Available in the following sizes:

4x1 gallon Fluorinated Poly, 4x4 liter Amber Glass, 5 gallon Poly w/Rieke Spout,
5 gallon Metal w/Rieke Spout, 5 gallon Cube w/spigot, 5 gallon Shelf Sitter w/spigot,
55 gallon New Metal Drum

TEST	SPECIFICATION	Typical Lot Analysis
Assay	NLT 99.4%	99.9%
Color, APHA	NMT 10	< 5
Residue After Evaporation, max.	0.005%	<0.001%
Titration Acid	NMT 0.0008meq/g	<0.0008meq/g
Butyl Ether	0.2%, max.	< 0.01%
Water	0.1%, max.	<0.005%
Appearance	Clear	Pass
Carbonyl Compounds (as Butyraldehyde)	0.01%, max.	< 0.002%
Specific Gravity @ 25/25C	0.807-0.809	Pass
Distilled Range w/in 1.5C Incl. 117.7C	To Pass	Pass
Isobutanol, wt%	0.10%, max.	Pass

Form N-Butanol-ACS, #101, Rev. 2.0, 08/01

Approved by: Paul DiMarco, Vice President Quality Management

FOR INDUSTRIAL OR LAB USE ONLY. Not intended as an active substance in Food or Drug. Not to be considered a Medical Device. Not intended for use as a Disinfectant as defined by the EPA. The expiration date of this product is three years from the date of manufacture. (Rev. # Disclaimer only: Rev 2.0 11/19/01 PJM)

This document has been electronically generated and is therefore not signed. A signed copy can be obtained from Pharmco's Quality Control office.

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Shipping Name: Butanol
 Hazard Class: 3
 UN: 1120
 PG: I
 Butyl Alcohol CAS No: 71-36-3

LOT NO:
 BATCH NO:

ISO 9002
 ANAB

pharmco
 PRODUCTS INC
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 Phone: (203) 740-3471 FAX: (203) 740-3481 DSD: CT, US

n-BUTYL ALCOHOL
REAGENT GRADE ACS

Catalog No: 120001ACS 1 Galons

FLAMMABLE LIQUID
 CHEMTREC NO. 1-800-424-9300
 3

2 3 0
 X

Product Specifications	Limits	Results
Assay (GC)	99.4%	99.94
Color (APHA)	<10	<5
Residue After Evaporation, max.	0.005%	<0.001%
Titration Acid, max.	0.0008 meq/g	0.00018
Butyl Ether, wt%	0.2% max	0.0014
Water, wt%	0.1%	0.01%
Appearance	Clear	Pass
Carbonyl Compounds (as Butyraldehyde)	0.01% max	ND
Specific Gravity	0.807-0.809	Pass
Distilling Range, w/in 1.5°C incl. 117.7°C	To Pass	117.7
Isobutanol, wt%	0.10% max	0.055

DANGER: FLAMMABLE LIQUID & VAPOR. Keep away from all sources of ignition. Improper Exposure Can Result in Injury or Death! Wear all recommended protective equipment. Refer to MSDS for additional information. *

STORAGE AND HANDLING: Keep in a cool, dry place. Do not expose to direct sunlight. Use only with proper personal protective equipment and ventilation. Refer to MSDS for additional information. *

FIRST AID: SEEK IMMEDIATE MEDICAL ATTENTION. REFER TO MSDS FOR APPROPRIATE FIRST AID FOR THIS CHEMICAL. *

REFER TO MSDS PRIOR TO USE. Use Only Under Appropriate Conditions. Use Only Under Trained Supervision. *

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