



CERTIFICATE OF ANALYSIS

Honeywell Specialty Chemicals Seelze GmbH
Wunstorferstrasse 40
Seelze, 30926
Telefon: +49 5137 999-0
lab.honeywell.com

Brand: Honeywell Riedel-de Haën
Product: 33065
Lot No: N3550
Production date: 21.Dec.2023
Rec. Retest Date: 24.Nov.2028

1-Butanol puriss. p.a., Reag. ACS, Reag. ISO, Reag. Ph. Eur.

Parameter	Specification	Units	Result	Units
assay (GC)	min. 99.5	%	99.84	%
boiling range	116 - 118	°C	116 - 118	°C
density (D 20/20)	0.808-0.812		0.808 - 0.812	
non-volatile matter	max. 0.001	%	<0.001	%
water (Karl Fischer)	max. 0.1	%	0.02	%
free acid (as C3H7COOH)	max. 0.005	%	<0.005	%
aluminium (Al)	max. 0.00005	%	<0.00005	%
boron (B)	max. 0.000002	%	<0.000002	%
barium (Ba)	max. 0.00001	%	<0.00001	%
calcium (Ca)	max. 0.00005	%	<0.00005	%
cadmium (Cd)	max. 0.000005	%	<0.000005	%
cobalt (Co)	max. 0.000002	%	<0.000002	%
chromium (Cr)	max. 0.000002	%	<0.000002	%
copper (Cu)	max. 0.000002	%	<0.000002	%
iron (Fe)	max. 0.00001	%	<0.00001	%
magnesium (Mg)	max. 0.00001	%	<0.00001	%
manganese (Mn)	max. 0.000002	%	<0.000002	%
nickel (Ni)	max. 0.000002	%	<0.000002	%
lead (Pb)	max. 0.00001	%	<0.00001	%
tin (Sn)	max. 0.00001	%	<0.00001	%
zinc (Zn)	max. 0.00001	%	<0.00001	%
iso-butanol (GC)	max. 0.15	%	<0.15	%
n-butyraldehyd (GC)	max. 0.01	%	<0.01	%
di-n-butylether (GC)	max. 0.1	%	<0.1	%
2-butanol (GC)	max. 0.05	%	<0.05	%
carbonyl compounds (as CO)	max. 0.01	%	<0.01	%



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Parameter	Specification	Units	Result	Units
APHA	max. 10		<10	

QC Release Date: 04.Jan.2024

The minimum shelf life is based on the current knowledge and holds only for proper storage conditions in the originally closed flasks/ packages.

We herewith confirm that the delivery is effected according to the technical delivery conditions agreed.

Particular properties of the products or the suitability for a particular area of application are not assured.

We guarantee a proper quality within our General Conditions of Sales.

Honeywell
Quality Management

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