

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

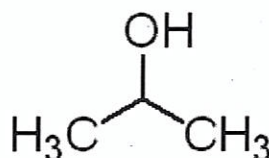
Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Specification

Product Name:
2-Propanol – anhydrous, 99.5%

Product Number: 278475
CAS Number: 67-63-0
MDL: MFCD00011674
Formula: C₃H₈O
Formula Weight: 60.10 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared spectrum	Conforms to Structure
Purity (GC)	≥ 99.45 %
Water (by Karl Fischer)	≤ 0.003 %
Note	
For 100 mL unit size, water content may exceed above specification; not to exceed 0.005%.	
Residue on Evaporation	≤ 0.0003 %

Specification: PRD.1.ZQ5.10000011482

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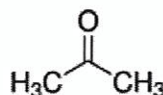
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Product Specification

Product Name:
Acetone - for HPLC, ≥99.9%

Product Number: 270725
CAS Number: 67-64-1
MDL: MFCD00008765
Formula: C₃H₆O
Formula Weight: 58.08 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared Spectrum	Conforms to Structure
UV Absorbance 400nm	≤ 0.01
UV Absorbance 350nm	≤ 0.02
UV Absorbance 340nm	≤ 0.10
UV Absorbance 330nm	≤ 1.00
Purity (GC)	≥ 99.90 %
Water (by Karl Fischer)	≤ 0.5 %
Residue on Evaporation	≤ 0.0002 %

Specification: PRD.1.ZQ5.10000016303

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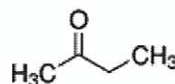
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Product Specification

Product Name:
2-Butanone - ACS reagent, ≥99.0%

Product Number: 360473
CAS Number: 78-93-3
MDL: MFCD00011648
Formula: C₄H₈O
Formula Weight: 72.11 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared spectrum	Conforms to Structure
Color Test	≤ 15 APHA
Purity (GC)	≥ 99.0 %
Residue on Evaporation	≤ 0.0025 %
Water (by Karl Fischer)	≤ 0.20 %
Titration Acid (meq/g)	≤ 0.0005
Meets ACS Requirements	Current ACS Specification

Specification: PRD.3.ZQ5.10000016788

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Product Specification

Product Name:

Glycidyl methacrylate - 97%, contains 100 ppm monomethyl ether hydroquinone as inhibitor

Product Number:

151238

CAS Number:

106-91-2

MDL:

MFCD00005137

Formula:

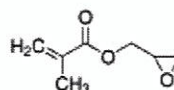
C₇H₁₀O₃

Formula Weight:

142.15 g/mol

Storage Temperature:

2 - 8 °C



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Refractive index at 20 °C	1.447 - 1.451
Infrared spectrum	Conforms to Structure
Purity (GC)	≥ 96.5 %
MEHQ as Inhibitor	50 - 150 ppm

Specification: PRD.1.ZQ5.10000009440

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Product Specification

Product Name:

Lauryl methacrylate – contains 500 ppm MEHQ as inhibitor, 96%

Product Number:

291811

CAS Number:

142-90-5

MDL:

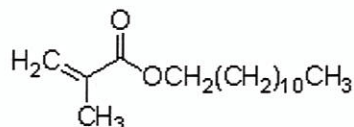
MFCD00008972

Formula:

C₁₆H₃₀O₂

Formula Weight:

254.41 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared spectrum	Conforms to Structure
Purity (GC)	≥ 95.5 %
MEHQ as Inhibitor	450 - 550 ppm

Specification: PRD.1.ZQ5.10000008736

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Product Specification

Product Name:

1,1,1,3,3,3-Hexafluoroisopropyl methacrylate 99%

Product Number:

367664

CAS Number:

3063-94-3

MDL:

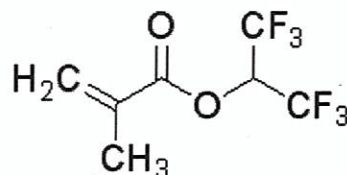
MFCD00040105

Formula:

C₇H₆F₆O₂

Formula Weight:

236.11 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Refractive index at 20 ° C	1.329- 1.333
Infrared spectrum	Conforms to Structure
Purity (GC)	≥98.5 %

Remarks:

Specification Date : 06/22/2010

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Product Specification

Product Name:

2,2,2-Trifluoroethyl methacrylate - contains 50-200 ppm MEHQ as inhibitor, 99%

Product Number:

373761

CAS Number:

352-87-4

MDL:

MFCD00013576

Formula:

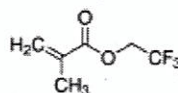
C₆H₇F₃O₂

Formula Weight:

168.11 g/mol

Storage Temperature:

2 - 8 °C



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared Spectrum	Conforms to Structure
Purity (GC)	≥ 98.5 %
Inhibitor	Confirmed
MEHQ: 50 - 200ppm	

Specification: PRD.1.ZQ5.10000051843

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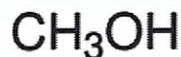
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Product Specification

Product Name:
Methanol - for HPLC, ≥99.9%

Product Number: 34860
CAS Number: 67-56-1
MDL: MFCD00004595
Formula: CH₄O
Formula Weight: 32.04 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Color Test	≤ 10 APHA
UV Absorbance 400nm	≤ 0.01
UV Absorbance 280nm	≤ 0.01
UV Absorbance 260nm	≤ 0.04
UV Absorbance 240nm	≤ 0.10
UV Absorbance 235nm	≤ 0.10
UV Absorbance 230nm	≤ 0.20
UV Absorbance 220nm	≤ 0.30
UV Absorbance 210nm	≤ 0.60
UV Absorbance 205nm	≤ 1.00
Purity (GC)	≥ 99.90 %
Residue on Evaporation	≤ 0.0005 %
Water (by Karl Fischer)	≤ 0.03 %
Fluorescence 254nm	≤ 1.0 ppb
Fluorescence 365nm	≤ 1.0 ppb
Recommended Retest Period	-----
60 Months	

Specification: PRD.3.ZQ5.10000015797

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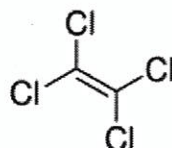
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Product Specification

Product Name:
Tetrachloroethylene - ACS reagent, ≥99.0%

Product Number: 443786
CAS Number: 127-18-4
MDL: MFCD00000834
Formula: C₂Cl₄
Formula Weight: 165.83 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared spectrum	Conforms to Structure
GC (area %)	≥ 99.0 %
Water (by Karl Fischer)	≤ 0.05 %
Residue on Evaporation	≤ 5 ppm
Color Test	≤ 10 APHA
Meets ACS Requirements	Current ACS Specification

Specification: PRD.1.ZQ5.10000013649

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Product Specification

Product Name:
Ethyl alcohol, Pure - 200 proof, anhydrous, ≥99.5%

Product Number: 459836
CAS Number: 64-17-5
MDL: MFCD00003568
Formula: C₂H₆O
Formula Weight: 46.07 g/mol



TEST	Specification
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Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared Spectrum	Conforms to Structure
Purity (GC)	≥ 99.50 %
Water (by Karl Fischer)	≤ 0.005 %
Residue on Evaporation	≤ 0.0005 %
Starting Material Clearance	Confirmed
Traceable to ACS product Listing	

Specification: PRD.3.ZQ5.10000004686

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Product Specification

Product Name:

Diethyl ether - contains 1 ppm BHT as inhibitor, anhydrous, ≥99.7%

Product Number:

296082

CAS Number:

60-29-7

MDL:

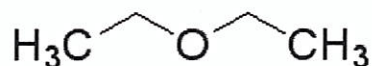
MFCD00011646

Formula:

C₄H₁₀O

Formula Weight:

74.12 g/mol



TEST	Specification
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Infrared spectrum	Conforms to Structure
Purity (GC)	≥ 99.70 %
BHT as Inhibitor	≥ 1 ppm
Residue on Evaporation	≤ 0.0003 %
Water (by Karl Fischer)	≤ 0.003 %

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Product Specification

Product Name:
Hydrochloric acid - 36.5-38.0%, BioReagent, for molecular biology

Product Number: **H1758**
CAS Number: 7647-01-0
MDL: MFCD00011324
Formula: HCl
Formula Weight: 36.46 g/mol

HCl

TEST	Specification
Appearance (Clarity)	Clear
Appearance (Color)	Colorless
Appearance (Form)	Liquid
Iron (Fe)	≤ 0.2 ppm
Heavy Metal (as Lead)	≤ 1 ppm
as Lead	
Purity (Titration by NaOH)	36.5 - 38.0 %

Specification: PRD.0.ZQ5.10000011037

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Specification Sheet

SIGMA-ALDRICH®

Product Name	Nitric acid, puriss. p.a., reag. ISO, reag. Ph. Eur., for determinations with dithizone, ≥65%
Product Number	30709
Product Brand	SIGALD
CAS Number	<u>7697-37-2</u>
Molecular Weight	63.01

TEST	SPECIFICATION
APPEARANCE (COLOR)	Colorless to Almost Colorless
APPEARANCE (FORM)	Liquid
APPEARANCE (TURBIDITY)	Clear
ASSAY	≥ 65 %
SULFATED ASH	≤ 0.0005 %
APPLICATION TEST	suitab.f.det.w.dithizone: complying
SILVER	≤ 0.000001 %
ALUMINIUM	≤ 0.000005 %
ARSEN	≤ 0.000001 %
BARIUM	≤ 0.000001 %
BERYLLIUM	≤ 0.000001 %
BISMUTH	≤ 0.00001 %
CALCIUM	≤ 0.00001 %
CADMIUM	≤ 0.000001 %
COBALT	≤ 0.000001 %
CHROMIUM	≤ 0.000002 %
COPPER	≤ 0.000001 %
IRON	≤ 0.00001 %
GERMANIUM	≤ 0.000005 %
MERCURY	≤ 0.000001 %
POTASSIUM	≤ 0.000005 %
LITHIUM	≤ 0.000001 %
MAGNESIUM	≤ 0.00001 %
MANGANESE	≤ 0.000001 %
MOLYBDENUM	≤ 0.000002 %
SODIUM	≤ 0.00005 %
NICKEL	≤ 0.000002 %
LEAD	≤ 0.000001 %
STRONTIUM	≤ 0.000001 %
TITANIUM	≤ 0.00001 %
THALLIUM	≤ 0.000005 %
VANADIUM	≤ 0.000001 %
ZINC	≤ 0.000005 %
ZIRCONIUM	≤ 0.00001 %
CHLORIDE (CL)	≤ 0.00005 %
PHOSPHATE (PO4)	≤ 0.00005 %
SULFATE (SO4)	≤ 0.00005 %
RECOMMENDED RETEST PERIOD	18 Months

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Product Specification

Product Name:
Sodium chloride - BioXtra, ≥99.5% (AT)

Product Number: **S7653**
CAS Number: 7647-14-5
MDL: MFCD00003477
Formula: ClNa
Formula Weight: 58.44 g/mol

NaCl

TEST	Specification
Appearance (Color)	White
Appearance (Form)	Powder
powder to fine crystals with lumps	
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
1 M in H ₂ O	
Bromide (Br)	Pass
< / = 0.01%	
Iodide (I)	Pass
< / = 0.001%	
Insoluble Matter	Pass
Passes filter test	
Sulfate (SO ₄)	≤ 0.05 %
Potassium (K)	≤ 0.005 %
Phosphate (PO ₄)	≤ 0.0005 %
Aluminum (Al)	≤ 0.0005 %
Bismuth (Bi)	≤ 0.0005 %
Lead (Pb)	≤ 0.0005 %
Arsenic (As)	Pass
< / = 0.0001%	
Barium (Ba)	≤ 0.0005 %
Cadmium (Cd)	≤ 0.0005 %
Cobalt (Co)	≤ 0.0005 %
Copper (Cu)	≤ 0.0005 %

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Product Specification

Product Name:
Sodium chloride - BioXtra, ≥99.5% (AT)

Product Number: **S7653**
CAS Number: 7647-14-5
MDL: MFCD00003477
Formula: ClNa
Formula Weight: 58.44 g/mol

NaCl

TEST	Specification
Strontium (Sr)	≤ 0.0005 %
Zinc (Zn)	≤ 0.0005 %
Calcium (Ca)	≤ 0.002 %
Chromium (Cr)	≤ 0.0005 %
Magnesium (Mg)	≤ 0.0005 %
Manganese (Mn)	≤ 0.0005 %
Iron (Fe)	≤ 0.0001 %
Lithium (Li)	≤ 0.0005 %
Molybdenum (Mo)	≤ 0.0005 %
Nickel (Ni)	≤ 0.0005 %
A260 UV Absorption 1 M in H ₂ O	≤ 0.01
A280 UV Absorption 1 M in H ₂ O	≤ 0.01
pH 1 M in H ₂ O at 20 deg C	5.0 - 8.0
Titration with AgNO ₃	≥ 99.5 %
Recommended Retest Period 6 years	-----

Specification: PRD.2.ZQ5.10000006430

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