

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

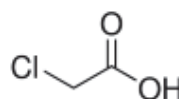
Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Specification

Product Name:
Chloroacetic acid - 99%

Product Number: **C19627**
 CAS Number: 79-11-8
 MDL: MFCD00002683
 Formula: C₂H₃ClO₂
 Formula Weight: 94.50 g/mol



TEST	Specification
Appearance (Color)	White
Appearance (Form)	Powder or Flake or Crystals or Crystalline Chunk(s)
Infrared spectrum	Conforms to Structure
Titration with NaOH	98.5 - 101.5 %
GC (area %)	≥ 98.5 %
Recommended Retest Period	-----
2 Years	

Specification: PRD.1.ZQ5.10000012686

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

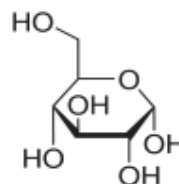
Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Specification

Product Name:
D-(+)-Glucose - BioXtra, ≥99.5% (GC)

Product Number: **G7528**
CAS Number: 50-99-7
MDL: MFCD00063774
Formula: C₆H₁₂O₆
Formula Weight: 180.16 g/mol



TEST	Specification
Appearance (Color)	White
Appearance (Form)	Powder
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
1 M in H ₂ O	
¹ H NMR Spectrum	Conforms to Structure
Purity (GC)	≥ 99.5 %
Loss on Drying	≤ 0.1 %
Residue on ignition (Ash)	≤ 0.1 %
as Sulfate	
Insoluble Matter	Pass
Passes Filter Test	
Chloride Content	≤ 0.005 %
Sulfate (SO ₄)	≤ 0.005 %
Aluminum (Al)	≤ 0.0005 %
Bismuth (Bi)	≤ 0.0005 %
Lead (Pb)	≤ 0.0005 %
Arsenic (As)	Pass
< or = 0.0001%	
Barium (Ba)	≤ 0.0005 %
Cadmium (Cd)	≤ 0.0005 %
Cobalt (Co)	≤ 0.0005 %
Strontium (Sr)	≤ 0.0005 %
Copper (Cu)	≤ 0.0005 %

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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:
Potassium chloride - BioXtra, ≥99.0%

Product Number: **P9333**
CAS Number: 7447-40-7
MDL: MFCD00011360
Formula: KCl
Formula Weight: 74.55 g/mol

KCl

TEST	Specification
------	---------------

Appearance (Color)	White
Appearance (Form)	Powder or Crystals
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
1M, H2O	
Ammonia (NH4)	≤ 0.05 %
Insoluble matter	≤ 0.1 %
Sulfate (SO4)	≤ 0.001 %
Aluminum (Al)	≤ 0.0005 %
Phosphorus (P)	≤ 0.0005 %
Lead (Pb)	≤ 0.001 %
Iron (Fe)	≤ 0.0005 %
Copper (Cu)	≤ 0.0005 %
Zinc (Zn)	≤ 0.0005 %
Calcium (Ca)	≤ 0.005 %
Magnesium (Mg)	≤ 0.001 %
Sodium (Na)	≤ 0.02 %
Titration with AgNO3	≥ 99.0 %
Recommended Retest Period	-----
3 years	

Specification: PRD.4.ZQ5.10000026528

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

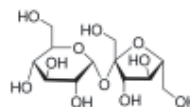
3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Product Specification

Product Name:
Sucrose - BioXtra, ≥99.5% (GC)

Product Number: **S7903**
CAS Number: 57-50-1
MDL: MFCD00006626
Formula: C₁₂H₂₂O₁₁
Formula Weight: 342.30 g/mol



TEST	Specification
Appearance (Color)	White
Appearance (Form)	Crystals
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
1 M, H ₂ O	
Infrared spectrum	Conforms to Structure
Loss on Drying	≤ 0.2 %
(HV, at 18-26 deg C)	
Residue on ignition (Ash)	≤ 0.01 %
(as SO ₄)	
Chloride Content	≤ 0.005 %
Sulfate (SO ₄)	≤ 0.005 %
Insoluble Matter	Pass
Passes filter test	
Purity (GC)	≥ 99.5 %
Aluminum (AL)	≤ 0.0005 %
Lead (Pb)	≤ 0.0005 %
Bismuth (Bi)	≤ 0.0005 %
Calcium (Ca)	≤ 0.001 %
Chromium (Cr)	≤ 0.0005 %
Magnesium (Mg)	≤ 0.0005 %
Manganese (Mn)	≤ 0.0005 %
Iron (Fe)	≤ 0.0005 %
Lithium	≤ 0.0005 %

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.com

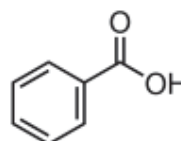
Email USA: techserv@sial.com

Outside USA: eurtechserv@sial.com

Product Specification

Product Name:
Benzoic acid - ACS reagent, ≥99.5%

Product Number: **242381**
 CAS Number: 65-85-0
 MDL: MFCD00002398
 Formula: C₇H₆O₂
 Formula Weight: 122.12 g/mol



TEST	Specification
Appearance (Color)	White
Appearance (Form)	Conforms to Requirements
Powder, Crystalline Powder, Flakes or Chips	
Infrared spectrum	Conforms to Structure
Purity (Titration by NaOH)	≥ 99.5 %
Residue on Ignition	≤ 0.005 %
Freezing point	122 - 123 °C
Insoluble matter	≤ 0.005 %
C= 10% Methanol	
Chlorine Compounds	≤ 0.005 %
Substances reducing (by MnO ₄)	Pass
Sulfur compounds	≤ 0.002 %
Heavy Metal (as Lead)	≤ 5 ppm
Meets ACS Requirements	Current ACS Specification

Specification: PRD.1.ZQ5.10000007826

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.