

Bisphenol Analog Standards

Bisphenol A (2,2'-bis(4-hydroxyphenyl)propane, BPA) has been used in commercial and industrial applications since the 1970's. It has been the subject of numerous toxicological studies due to human exposure from leachate originating from polycarbonate plastics and epoxy-lined food and drink containers.

The evidence of the toxic effects of BPA has led to restrictions and regulations, resulting in its replacement in commercial products with related compounds. Several chemicals with structural similarity to BPA (i.e. two hydroxyl phenyl moieties) have been used as alternatives in the manufacture of polycarbonate plastics and epoxy resins. 4,4'-sulfonyldiphenol (BPS) and 4,4'-dihydroxydiphenylmethane (BPF) are the two main substitutes. However, their similarity to BPA has led to their monitoring and testing for human exposure and toxicity as well.

In addition to the BPA analogs, there has been increased scrutiny of bisphenol A diglycidyl ether (BADGE) which is a widely used building block of epoxy resin. Studies have shown that it also might be linked to adverse human health effects.

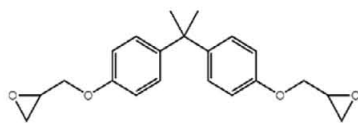
AccuStandard has recognized the need for a comprehensive product line of these BPA related compounds; and is offering reference standards for eight BPA analogs as well as the BADGE starting material.



References:

1. Environ. Sci. Technol. 2012, 46, 9138-9145
2. Environ. Sci. Technol. 2012, 46, 12968-12976
3. Environ. Sci. Technol. 2012, 46, 11558-11565

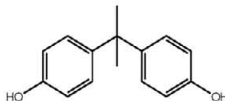
Bisphenol A diglycidyl ether (BADGE)



CAS 1675-54-3 MF C₂₁H₂₄O₄ MW 340.41
log Kow 3.8 PS S SOL MeOH SG 1.16 g/cm³
MP 8-12 °C BP >200 °C FP N/A

Matrix	Cat. No.	Unit
NEAT	BADGE-001N	50 mg
10 mg/mL in MeOH	BADGE-001S	1 mL

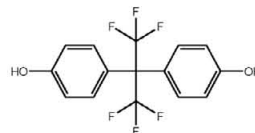
Bisphenol A (BPA)



CAS 80-05-7 MF C₁₅H₁₆O₂ MW 228.29
log Kow 3.43 PS S SOL Acetone, Benzene, Ether
SG 1.14 g/cm³ MP 156 °C BP 220 °C FP 192 °C

Matrix	Cat. No.	Unit
NEAT	BPA-A-N	50 mg
10 mg/mL in MeOH	BPA-A-S	1 mL

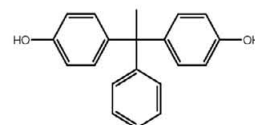
Bisphenol AF



CAS 1478-61-1 MF C₁₆H₁₀F₄O₂ MW 336.23
log Kow 4.47 PS S SG 1.45 g/cm³ MP 125-126 °C
BP 344-345 °C FP 162 °C

Matrix	Cat. No.	Unit
NEAT	BPA-AF-N	50 mg
10 mg/mL in MeOH	BPA-AF-S	1 mL

Bisphenol AP



CAS 1571-75-1 MF C₂₀H₁₈O₂ MW 290.36
log Kow 4.86 PS S SG 1.18 g/cm³ MP 182-183 °C
BP 473-475 °C FP 222 °C

Matrix	Cat. No.	Unit
NEAT	BPA-AP-N	50 mg
10 mg/mL in MeOH	BPA-AP-S	1 mL



Property Key

CAS	Chemical Abstract Service Number
MF	Molecular Formula
MW	Molecular Weight
PS	Physical State (Solid, Liquid)
SOL	Solubility
SG	Specific Gravity (g/cm ³)
MP	Melting Point (°C)
BP	Boiling Point (°C)
FP	Flash Point (°C)

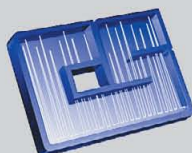


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Additional Bisphenol Analog Standards on back side

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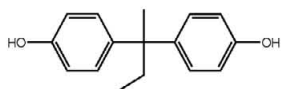


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Bisphenol Analog Standards

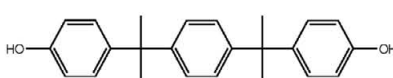
Bisphenol B



CAS 77-40-7 **MF** C₁₆H₁₈O₂ **MW** 242.31
log Kow 4.13 **PS** S **SG** 1.12 g/cm³ **MP** 138-140 °C
BP 412-414 °C **FP** 196 °C

Matrix	Cat. No.	Unit
NEAT	BPA-B-N-10MG	10 mg
10 mg/mL in MeOH	BPA-B-S	1 mL

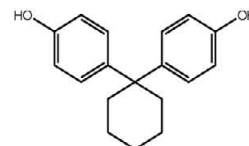
Bisphenol P



CAS N/A **MF** C₂₄H₃₀O₂ **MW** 346.46
log Kow 6.25 **PS** S **SG** 1.11 g/cm³ **MP** 199-200 °C
BP 514-515 °C **FP** 230 °C

Matrix	Cat. No.	Unit
NEAT	BPA-P-N	50 mg
10 mg/mL in MeOH	BPA-P-S	1 mL

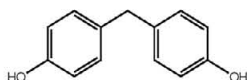
Bisphenol Z



CAS N/A **MF** C₁₈H₂₀O₂ **MW** 268.35
log Kow 5.00 **PS** S **SG** 1.17 g/cm³ **MP** 165-166 °C
BP 440-441 °C **FP** 207 °C

Matrix	Cat. No.	Unit
NEAT	BPA-Z-N	50 mg
10 mg/mL in MeOH	BPA-Z-S	1 mL

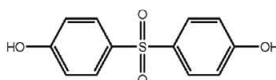
Bisphenol F



CAS N/A **MF** C₁₃H₁₂O₂ **MW** 200.23
log Kow 2.91 **PS** S **SG** 1.21 g/cm³ **MP** 128-130 °C
BP 389-390 °C **FP** 193 °C

Matrix	Cat. No.	Unit
NEAT	BPA-F-N-10MG	10 mg
10 mg/mL in MeOH	BPA-F-S	1 mL

Bisphenol S



CAS N/A **MF** C₁₂H₁₀O₃S **MW** 250.27
log Kow 1.65 **PS** S **SG** 1.43 g/cm³ **MP** 176-177 °C
BP 505-506 °C **FP** 259 °C

Matrix	Cat. No.	Unit
NEAT	BPA-S-N	50 mg
10 mg/mL in MeOH	BPA-S-S	1 mL

Property Key

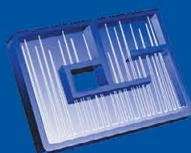
CAS	Chemical Abstract Service Number
MF	Molecular Formula
MW	Molecular Weight
PS	Physical State (Solid, Liquid)
SOL	Solubility
SG	Specific Gravity (g/cm ³)
MP	Melting Point (°C)
BP	Boiling Point (°C)
FP	Flash Point (°C)



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