

Bisphenol Analogs

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 (ie. 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.

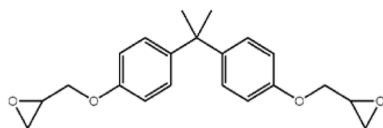
AccuStandard has recognized the need for a comprehensive product line of these BPA related compounds and is offering reference standards for eight BPA analogs as well as the BADGE starting material.

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)

2,2-bis(4-Glycidyloxyphenyl)propane

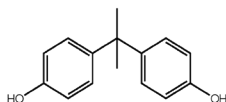


CAS 1675-54-3 MF $C_{21}H_{24}O_4$ MW 340.41
log Kow 3.8 PS L SOL MeOH SG 1.16 g/cm³
MP N/A BP >200 °C FP N/A

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

Bisphenol A (BPA)

2,2-bis(4-Hydroxyphenyl)propane

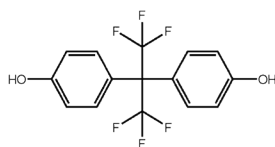


CAS 80-05-7 MF $C_{15}H_{16}O_2$ MW 228.29
log Kow 3.43 PS S SOL Acetone, Benzene, Ether
SG 1.14 g/cm³ MP 156 °C BP 220 °C FP 192 °C

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

Bisphenol AF

2,2-bis(4-Hydroxyphenyl)-1,1,1,3,3,3-hexafluoropropane

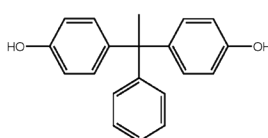


CAS 1478-61-1 MF $C_{15}H_{10}F_6O_2$ MW 336.23
log Kow 4.47 PS S SG 1.45 g/cm³ MP 159-162 °C
BP 400 °C FP 162 °C

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

Bisphenol AP

1,1-bis(4-Hydroxyphenyl)-1-phenylethane

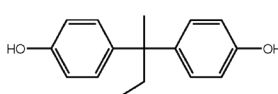


CAS 1571-75-1 MF $C_{20}H_{18}O_2$ MW 290.36
log Kow 4.86 PS S SG 1.18 g/cm³ MP 182-183 °C
BP 473-475 °C FP 222 °C

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

Bisphenol B

2,2-bis(4-Hydroxyphenyl)butane

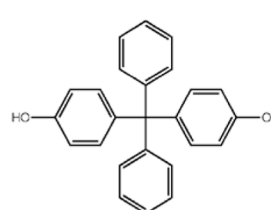


CAS 77-40-7 MF $C_{16}H_{18}O_2$ MW 242.31
log Kow 4.13 PS S SG 1.12 g/cm³ MP 126 °C
BP 412-414 °C FP 196 °C

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

Bisphenol BP NEW

bis(4-Hydroxyphenyl)diphenylmethane

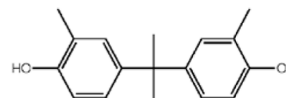


CAS 1844-01-5 MF $C_{25}H_{20}O_2$ MW 352.43
log Kow 6.08 PS S SG 1.20 g/cm³ MP 216-217 °C
BP 508-510 °C FP 241 °C

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

Bisphenol C NEW

2,2-bis(4-Hydroxy-3-methylphenyl)propane



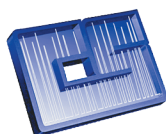
CAS 79-97-0 MF $C_{17}H_{20}O_2$ MW 256.34
log Kow 4.74 PS S SG 1.15 g/cm³ MP 139 °C
BP 390 °C FP >190 °C

Matrix	Cat. No.	Unit
NEAT	BPA-C-N	50 mg
10 mg/mL in MeOH	BPA-C-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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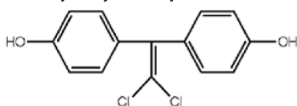
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Bisphenol Analogs

Bisphenol C-dichloride **NEW**

Dihydroxymethoxychlor olefin

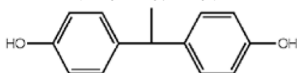


CAS 14868-03-2 **MF** C₁₄H₁₀Cl₂O₂ **MW** 281.13
log Kow 3.75 **PS** S **SG** 1.45 g/cm³ **MP** 216 °C
BP 395-398 °C **FP** >200 °C

Matrix	Cat. No.	Unit
NEAT	BPA-C2-N	20 mg
10 mg/mL in MeOH	BPA-C2-S	1 mL

Bisphenol E **NEW**

1,1-bis(4-Hydroxyphenyl)ethane

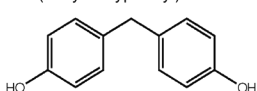


CAS 2081-08-5 **MF** C₁₄H₁₄O₂ **MW** 214.26
log Kow 3.19 **PS** S **SG** 1.25 g/cm³ **MP** 125 °C
BP 350-370 °C **FP** >180 °C

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

Bisphenol F

bis(4-Hydroxyphenyl)methane

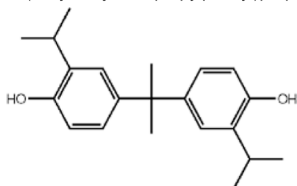


CAS 620-92-8 **MF** C₁₃H₁₂O₂ **MW** 200.23
log Kow 2.91 **PS** S **SG** 1.21 g/cm³ **MP** 163 °C
BP 389-390 °C **FP** 193 °C

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

Bisphenol G **NEW**

2,2-bis(4-Hydroxy-3-isopropylphenyl)propane

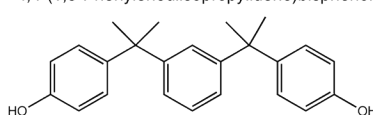


CAS 127-54-8 **MF** C₂₁H₂₈O₂ **MW** 312.45
log Kow 6.55 **PS** S **SG** 1.05 g/cm³ **MP** 98 °C
BP 419-420 °C **FP** 185 °C

Matrix	Cat. No.	Unit
NEAT	BPA-G-N	20 mg
10 mg/mL in MeOH	BPA-G-S	1 mL

Bisphenol M **NEW**

4,4-(1,3-Phenylenediisopropylidene)bisphenol

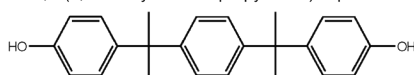


CAS 13595-25-0 **MF** C₂₄H₂₆O₂ **MW** 346.46
log Kow 6.25 **PS** S **SG** 1.15 g/cm³ **MP** 138 °C
BP >495 °C **FP** >200 °C

Matrix	Cat. No.	Unit
NEAT	BPA-M-N	20 mg
10 mg/mL in MeOH	BPA-M-S	1 mL

Bisphenol P

4,4-(1,4-Phenylenediisopropylidene)bisphenol

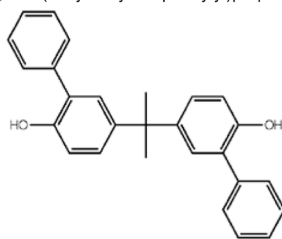


CAS 2167-51-3 **MF** C₂₄H₂₆O₂ **MW** 346.46
log Kow 6.25 **PS** S **SG** 1.11 g/cm³ **MP** 199-200 °C
BP 514-515 °C **FP** 230 °C

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

Bisphenol PH **NEW**

2,2-bis(2-Hydroxy-5-biphenyl)propane

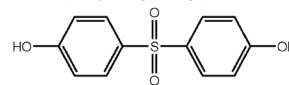


CAS 24038-68-4 **MF** C₂₄H₂₄O₂ **MW** 380.48
log Kow 7.17 **PS** S **SG** 1.20 g/cm³ **MP** 118 °C
BP 567-568 °C **FP** 250 °C

Matrix	Cat. No.	Unit
NEAT	BPA-PH-N	20 mg
10 mg/mL in MeOH	BPA-PH-S	1 mL

Bisphenol S

bis(4-Hydroxyphenyl) sulfone

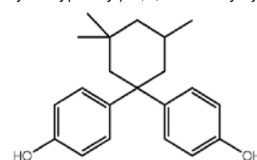


CAS 80-09-1 **MF** C₁₂H₁₀O₄S **MW** 250.27
log Kow 1.65 **PS** S **SG** 1.43 g/cm³ **MP** 245-250 °C
BP 505-506 °C **FP** 259 °C

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

Bisphenol TMC **NEW**

1,1-bis(4-Hydroxyphenyl)-3,3,5-trimethylcyclohexane

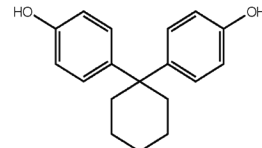


CAS 129188-99-4 **MF** C₂₁H₂₆O₂ **MW** 310.43
log Kow 6.29 **PS** S **SG** 1.10 g/cm³ **MP** 204-207 °C
BP 450 °C **FP** 203 °C

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

Bisphenol Z

1,1-bis(4-Hydroxyphenyl)cyclohexane

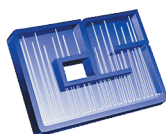


CAS 843-55-0 **MF** C₁₈H₂₀O₂ **MW** 268.35
log Kow 5.00 **PS** S **SG** 1.17 g/cm³ **MP** 189-192 °C
BP 440-441 °C **FP** 207 °C

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



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