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 lead 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 lead to their monitoring and testing for human exposure and toxicity as well.

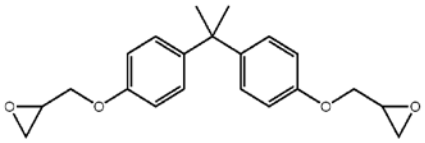
In addition to the BPA analogs, there has been increased scrutiny of bisphenol A diglycidyl ether (BADGE) which is a widely used building block of epoxy resin. Studies have shown that it also might be linked to adverse human health effects.

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

Property Key	
CAS	Chemical Abstract Service Number
MF	Molecular Formula
MW	Molecular Weight
PS	Physical State (Solid, Liquid)
SOL	Solubility
SG	Specific Gravity (g/cm³)
MP	Melting Point (°C)
BP	Boiling Point (°C)
FP	Flash Point (°C)

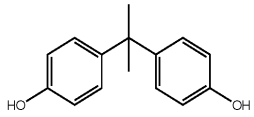
Bisphenol A diglycidyl ether (BADGE)



CAS 1675-54-3 **MF** $C_{21}H_{24}O_4$ **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

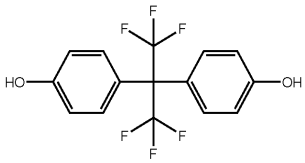
Bisphenol A (BPA)



CAS 80-05-7 **MF** $C_{15}H_{16}O_2$ **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

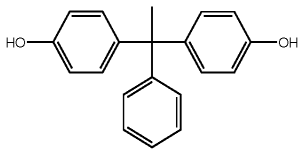
Bisphenol AF



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** 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

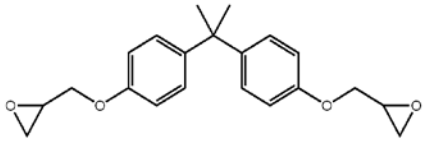
Bisphenol AP



CAS 1571-75-1 **MF** $C_{20}H_{18}O_2$ **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

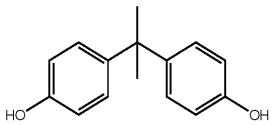
Bisphenol A diglycidyl ether (BADGE)



CAS 1675-54-3 **MF** $C_{21}H_{24}O_4$ **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

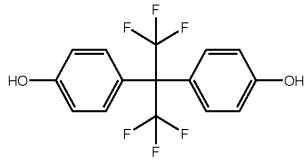
Bisphenol A (BPA)



CAS 80-05-7 **MF** $C_{15}H_{16}O_2$ **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

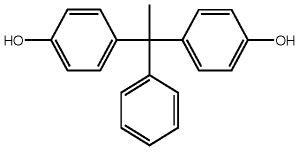
Bisphenol AF



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** 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

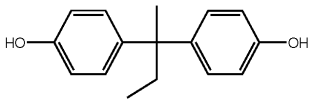
Bisphenol AP



CAS 1571-75-1 **MF** $C_{20}H_{18}O_2$ **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



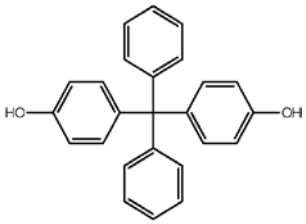
CAS 77-40-7 **MF** $C_{16}H_{18}O_2$ **MW** 242.31
log Kow 4.13 **PS** S **SG** 1.12 g/cm³ **MP** 138-140 °C
BP 412-414 °C **FP** 196 °C

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

Bisphenol Analog Standards

Bisphenol BP NEW

Bis(4-hydroxyphenyl)diphenylmethane

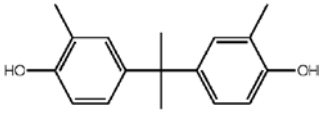


CAS 1844-01-5 **MF** $C_{25}H_{20}O_2$ **MW** 352.43
log Kow 6.08 **PS** S **SG** 1.20 g/cm³ **MP** 216-217 °C
BP 508-510 °C **FP** 241 °C

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

Bisphenol C NEW

4,4'-Propane-2,2-diylbis(2-methylphenol)

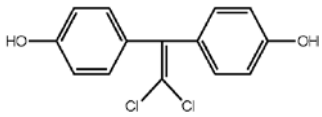


CAS 79-97-0 **MF** $C_{17}H_{20}O_2$ **MW** 256.34
log Kow 4.74 **PS** S **SG** 1.15 g/cm³ **MP** 139 °C
BP 390 °C **FP** >190 °C

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

Bisphenol C-dichloride NEW

Dihydroxymethoxychlor olef in

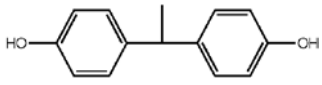


CAS 14868-03-2 **MF** $C_{14}H_{10}Cl_2O_2$ **MW** 281.13
log Kow 3.75 **PS** S **SG** 1.45 g/cm³ **MP** 216 °C
BP 395-398 °C **FP** >200 °C

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

Bisphenol E NEW

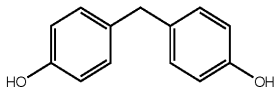
4,4'-Ethylidenebisphenol



CAS 2081-08-5 **MF** $C_{14}H_{14}O_2$ **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

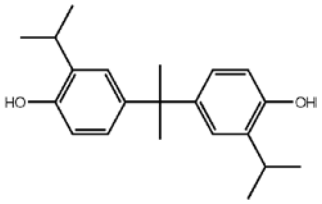


CAS N/A **MF** $C_{13}H_{12}O_2$ **MW** 200.23
log Kow 2.91 **PS** S **SG** 1.21 g/cm³ **MP** 128-130 °C
BP 389-390 °C **FP** 193 °C

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

Bisphenol G NEW

4,4'-Propane-2,2-diylbis(2-isopropylphenol)

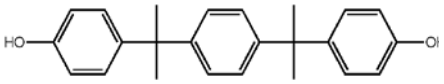


CAS 127-54-8 **MF** $C_{21}H_{28}O_2$ **MW** 312.45
log Kow 6.55 **PS** S **SG** 1.05 g/cm³ **MP** 98 °C
BP 419-420 °C **FP** 185 °C

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

Bisphenol M NEW

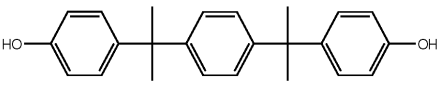
4,4'-(1,3-Phenylenediisopropylidene)bispheno



CAS 13595-25-0 **MF** $C_{24}H_{26}O_2$ **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

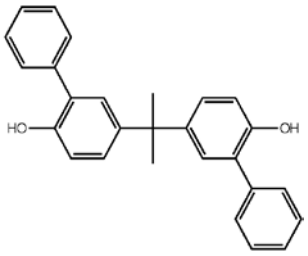


CAS N/A **MF** $C_{24}H_{26}O_2$ **MW** 346-46
log Kow 6.25 **PS** S **SG** 1.11 g/cm³ **MP** 199-200 °C
BP 514-515 °C **FP** 230 °C

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

Bisphenol PH NEW

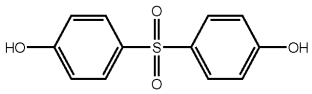
2,2-Bis(2-hydroxy-5-biphenylyl)propane



CAS 24038-68-4 **MF** $C_{24}H_{24}O_2$ **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

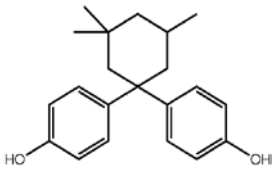


CAS N/A **MF** $C_{12}H_{10}O_4S$ **MW** 250.27
log Kow 1.65 **PS** S **SG** 1.43 g/cm³ **MP** 176-177 °C
BP 505-506 °C **FP** 259 °C

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

Bisphenol TMC NEW

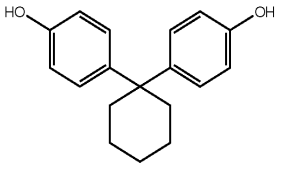
4,4'-(3,3,5-Trimethylcyclohexane-1,1-diyl)diphenol



CAS 129188-99-4 **MF** $C_{21}H_{26}O_2$ **MW** 310.43
log Kow 6.29 **PS** S **SG** 1.10 g/cm³ **MP** 180 °C
BP 450 °C **FP** 203 °C

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

Bisphenol Z



CAS N/A **MF** $C_{18}H_{20}O_2$ **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