

# ポリマー総合カタログ

重水素ポリマー試料 および 重水素機能性ポリマー試料  
編

## はじめに

### **重要なお知らせ：容量設定の追加**

この度、ポリマーソース **Polymer Source** 社では従来の容量に変わり、お客様の多様なニーズにお応えするため「**0.5g**」・「**1g**」・「**2g**」・「**5g**」の容量設定に改訂しました。本カタログの容量の記載は基本的な 1g での記載ですが、上記の容量での対応可能ですので、ご遠慮なくお申し付けください。

各ポリマーには出来る限り、CAS No. および構造式を記載しておりますが記載がないポリマーもございます。また、予告なく製品自体の終了・容量・価格等の変更がございます。併せてご了承下さい。

記載されているカタログ番号は、同時にロット番号となります。

従いまして、記載されている型番が在庫終了になりますと同一スペックの製品はご提供できない事になります。代替品がある場合はお知らせ致しますので、お含み下さいますようお願い致します。

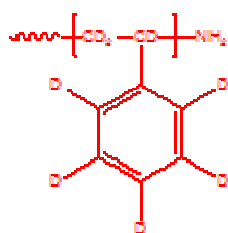
**納期：** 原則、ご注文後約1-2週間でお届けできます。

### **☆ 海外送料等について:**

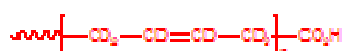
従来は、品代金に海外送料を含めてのご案内でしたが、複数点ご購入のユーザー様には海外送料の重複の弊害がございました。

その弊害を解消するため、品代金と海外送料を分けて、ご注文点数に係わらず1回のご注文に付き海外送料1回分といたしました。

カタログに表記しております金額は海外送料を含んでいない金額です。詳しくはお問い合わせ下さい。

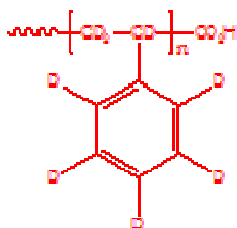
**Amino Terminated Deuterated Polystyrene**

P19081-dPSNH2	$M_n \times 10^3$ : 11.5	Mw/Mn : 1.35	1g
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**Carboxy Terminated Deuterated Poly(butadiene(1,4 addition))**

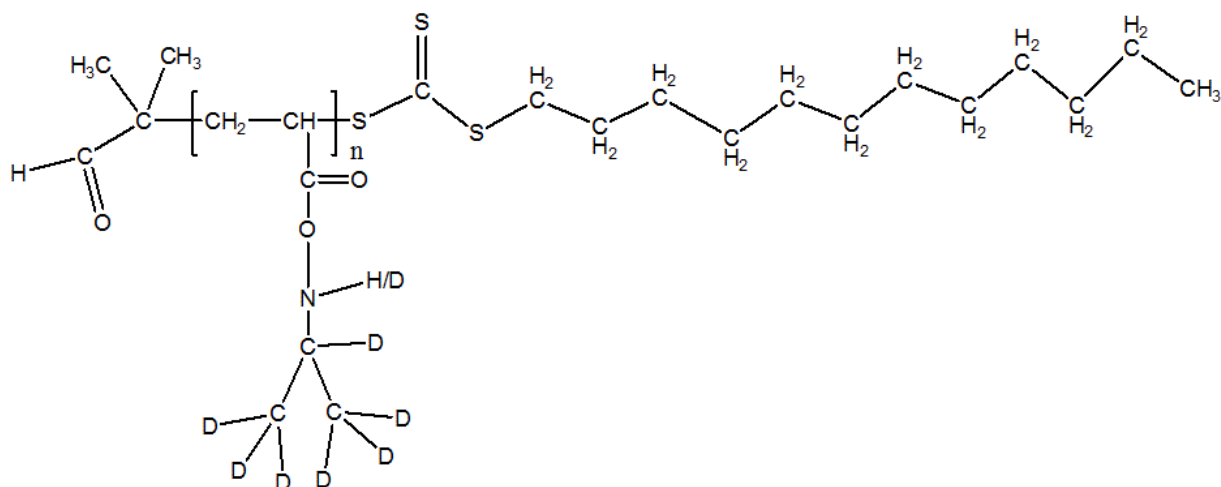
Comments: 1. rich in 1,4 addition over 80%

$M_n \times 10^3$ ("f")			
P3823-dPBdCOOH1	$M_n \times 10^3$ : 34(>0.95)	Mw/Mn : 1.14	1g
P3828-dPBdCOOH1	$M_n \times 10^3$ : 95(>0.95)	Mw/Mn : 1.07	1g

**Carboxy Terminated Deuterated Polystyrene**

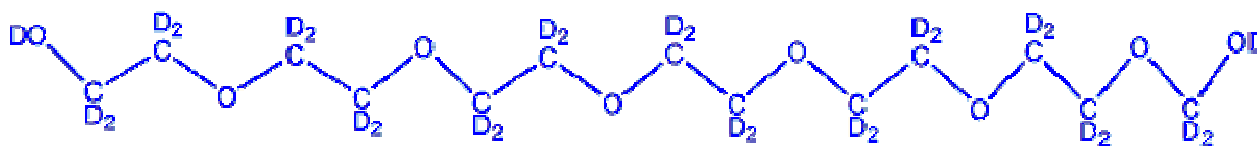
Comments: $M_n \times 10^3$ ("f")			
P6023-dPSCOOH	$M_n \times 10^3$ : 51.8(>0.95)	Mw/Mn : 1.03	1g
P6024-dPSCOOH	$M_n \times 10^3$ : 55.5(>0.95)	Mw/Mn : 1.05	1g

## Carboxylic acid Terminated Deuterated Poly(N-isopropyl acrylamide)



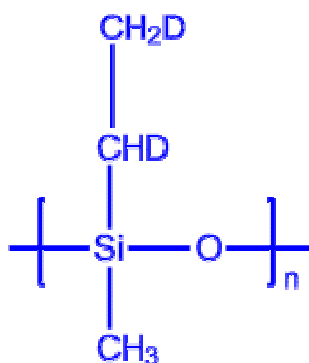
P14501-d7NIPAMCOOH	$M_n \times 10^3 : 7$	Mw/Mn : 1.1	1g
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## Completely Deuterated Poly(ethylene glycol) Dihydroxy Terminated



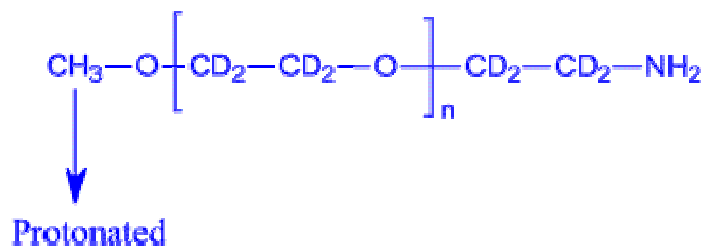
P9878A-dPEO2OD	$M_n \times 10^3 : 0.356$	Mw/Mn : 1.1	0.5g
P19948C-dPEO2OD	$M_n \times 10^3 : 0.356$	Mw/Mn : 1.1	0.5g
P9878B-dPEO2OD	$M_n \times 10^3 : 0.786$	Mw/Mn : 1.2	0.5g

## Deuterated (d2) Poly(ethyl methyl siloxane)



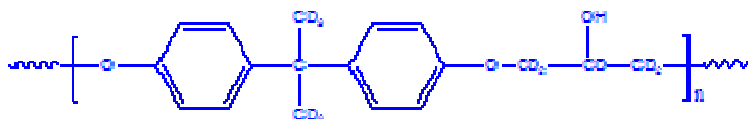
P10908-d2EtMS	$M_n \times 10^3 : 380$	Mw/Mn : 1.6	1g
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## Deuterated Amino terminated (monoelics) Poly ethylene glycol methylether



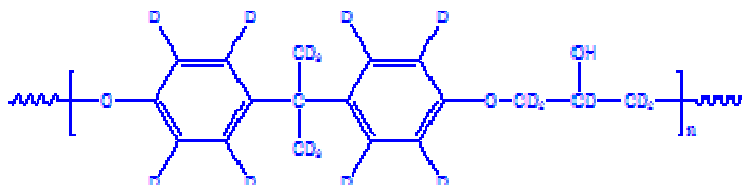
P11448-dPEO-OCH <sub>3</sub> NH <sub>2</sub>	M <sub>n</sub> x 10 <sup>3</sup> : 5	M <sub>w</sub> /M <sub>n</sub> : 1.17	0.5g
P11449-dPEO-OCH <sub>3</sub> NH <sub>2</sub>	M <sub>n</sub> x 10 <sup>3</sup> : 6.8	M <sub>w</sub> /M <sub>n</sub> : 1.1	0.5g

## Deuterated Bisphenol A based Poly(hydroxy ether (d11)



P2560-d11PHE	M <sub>n</sub> x 10 <sup>3</sup> : 57.4	M <sub>w</sub> /M <sub>n</sub> : 2.75	1g
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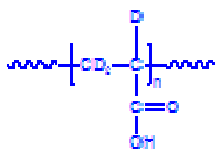
## Deuterated Bisphenol A based Poly(hydroxy ether (d19)



Comments: CAS # 25498-06-0.

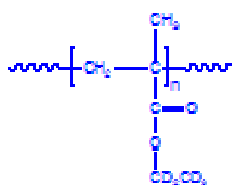
P2562-d19PHE	M <sub>n</sub> x 10 <sup>3</sup> : 20.4	M <sub>w</sub> /M <sub>n</sub> : 1.96	1g
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## Deuterated Poly (arylic acid) (d3)



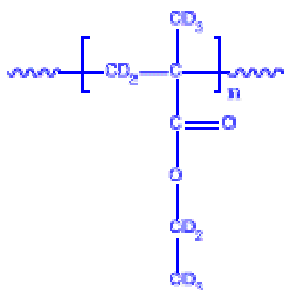
P6572-d3PAA	Mn x 10 <sup>3</sup> : 1.5	Mw/Mn : 1.9	0.5g
P6571-d3PAA	Mn x 10 <sup>3</sup> : 3.2	Mw/Mn : 1.25	0.5g
P19281-d3PAA	Mn x 10 <sup>3</sup> : 3.3	Mw/Mn : 1.1	0.5g
P6566A-d3PAA	Mn x 10 <sup>3</sup> : 3.4	Mw/Mn : 1.3	0.5g
P19281A-d3PAA	Mn x 10 <sup>3</sup> : 4	Mw/Mn : 1.1	0.5g
P5648A-d3PAA	Mn x 10 <sup>3</sup> : 8	Mw/Mn : 4.8	0.5g
P16108B-d3PAA	Mn x 10 <sup>3</sup> : 12	Mw/Mn : 1.3	0.5g
P14869-d3PAA	Mn x 10 <sup>3</sup> : 14	Mw/Mn : 1.9	0.5g
P16108C-d3PAA	Mn x 10 <sup>3</sup> : 17	Mw/Mn : 1.24	0.5g
P16108A-d3PAA	Mn x 10 <sup>3</sup> : 25	Mw/Mn : 1.3	0.5g
P40178-d3PAA	Mn x 10 <sup>3</sup> : 45	Mw/Mn : 1.15	0.5g
P11083C-d3PAA	Mn x 10 <sup>3</sup> : 84	Mw/Mn : 1.14	0.5g
P14414-d3PAA	Mn x 10 <sup>3</sup> : 210	Mw/Mn : 1.25	0.5g

## Deuterated Poly (ethyl metacrylate) d5



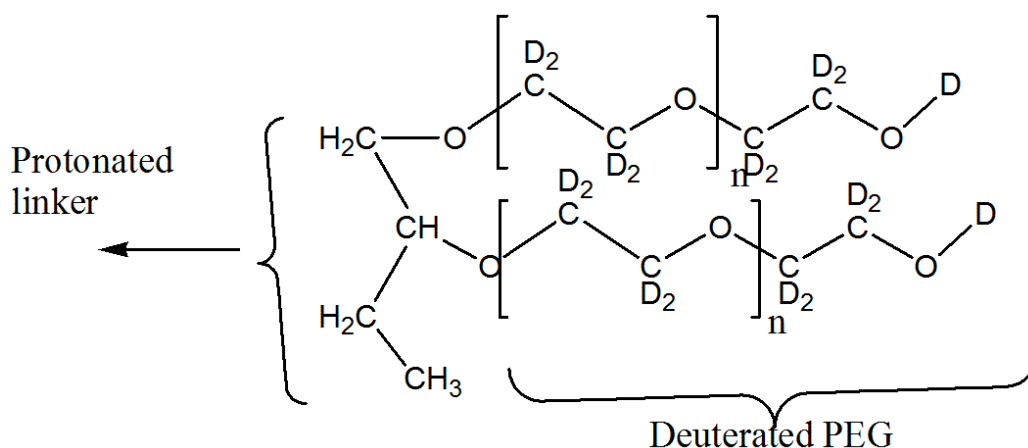
P6263-d5PEMA	Mn x 10 <sup>3</sup> : 8.2	Mw/Mn : 1.06	1g
P6263A-d5PEMA	Mn x 10 <sup>3</sup> : 8.2	Mw/Mn : 1.11	1g
P6264-d5PEMA	Mn x 10 <sup>3</sup> : 11.5	Mw/Mn : 1.05	1g
P8338-d5PEMA	Mn x 10 <sup>3</sup> : 14	Mw/Mn : 1.2	1g
P6038- d5PEMA	Mn x 10 <sup>3</sup> : 26	Mw/Mn : 1.4	1g

## Deuterated Poly (ethyl methacrylate) d10



P8341-d10PEtMA	Mn x 10 <sup>3</sup> : 2.5	Mw/Mn : 2.4	0.5g
P6393-d10PEtMA	Mn x 10 <sup>3</sup> : 4.8	Mw/Mn : 1.07	0.5g
P8337-d10PEtMA	Mn x 10 <sup>3</sup> : 14	Mw/Mn : 1.3	0.5g
P6398-d10PEtMA	Mn x 10 <sup>3</sup> : 17	Mw/Mn : 1.06	0.5g

## Deuterated Poly (ethylene glycol [d4]), with protonated linker



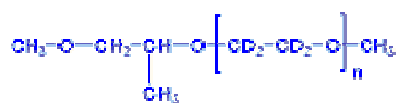
P18986-dPEO2Arms	Mn x 10 <sup>3</sup> : 21.5	Mw/Mn : 1.18	1g
P19016A-dPEO2Arms	Mn x 10 <sup>3</sup> : 43.5	Mw/Mn : 1.22	1g
P19016B-dPEO2Arms	Mn x 10 <sup>3</sup> : 49.7	Mw/Mn : 1.14	1g
P19016-dPEO2Arms	Mn x 10 <sup>3</sup> : 58.7	Mw/Mn : 1.08	1g

## Deuterated Poly (ethylene glycol) Deuterated Ethyl Ether



P3337-dPEO	Mn x 10 <sup>3</sup> : 1.3	Mw/Mn : 1.09	1g
P3864A-dPEO	Mn x 10 <sup>3</sup> : 2.7	Mw/Mn : 1.25	1g
P2632-dPEO	Mn x 10 <sup>3</sup> : 124.5	Mw/Mn : 1.07	1g

## Deuterated Poly (ethylene glycol) Dimethyl Ether (1)

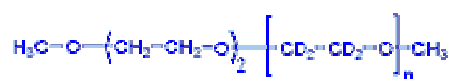


P2771-dPEO2MeO	Mn x 10 <sup>3</sup> : 1.6	Mw/Mn : 1.08	1g
P2305-dPEO2MeO	Mn x 10 <sup>3</sup> : 2.4	Mw/Mn : 1.08	1g

## Deuterated Poly (ethylene glycol) Dimethyl Ether (2)



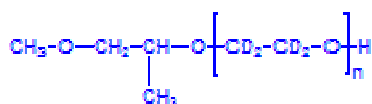
P3890-dPEO2MeO	Mn x 10 <sup>3</sup> : 1.2	Mw/Mn : 1.12	1g
P3888-dPEO2MeO	Mn x 10 <sup>3</sup> : 1.7	Mw/Mn : 1.14	1g

**Deuterated Poly (ethylene glycol) Dimethyl Ether (3)**

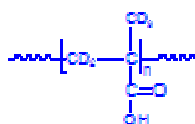
P3887-dPEO2MeO	Mn x 10 <sup>3</sup> : 1.8	Mw/Mn : 1.08	1g
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**Deuterated Poly (ethylene glycol) Methyl Ether (1)**

P5381-dPEO-OCH3	Mn x 10 <sup>3</sup> : 2.2	Mw/Mn : 1.13	1g
P11450-dPEO-OCH3	Mn x 10 <sup>3</sup> : 5	Mw/Mn : 1.08	1g

**Deuterated Poly (ethylene glycol) Methyl Ether (2)**

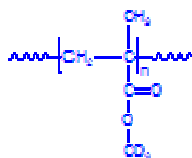
P2220-dPEO	Mn x 10 <sup>3</sup> : 19.1	Mw/Mn : 1.1	1g
P4333-dPEO	Mn x 10 <sup>3</sup> : 33	Mw/Mn : 1.1	1g

**Deuterated Poly (methacrylic acid) d5**

P5925B-d5MAA	Mn x 10 <sup>3</sup> : 4.2	Mw/Mn : 1.4	1g
P5925A-d5PMAA	Mn x 10 <sup>3</sup> : 7	Mw/Mn : 1.13	1g
P14546-d5MAA	Mn x 10 <sup>3</sup> : 20	Mw/Mn : 3.5	1g
P14546A-d5MAA	Mn x 10 <sup>3</sup> : 365	Mw/Mn : 1.06	1g
P19276-D5MAA	Mn x 10 <sup>3</sup> : 855	Mw/Mn : 1.26	1g

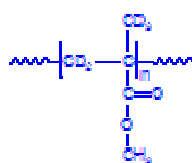


## Deuterated Poly (methyl methacrylate) d3-ester



P1206-d3PMMA	Mn x 10 <sup>3</sup> : 1.7	Mw/Mn : 1.5	1g
P40388A-d3PMMA	Mn x 10 <sup>3</sup> : 2.5	Mw/Mn : 1.3	1g
P40388-d3PMMA	Mn x 10 <sup>3</sup> : 3.5	Mw/Mn : 1.45	1g
P40388B-d3PMMA	Mn x 10 <sup>3</sup> : 3.5	Mw/Mn : 1.45	By GTP 1g
P4503-d3PMMA	Mn x 10 <sup>3</sup> : 14.5	Mw/Mn : 1.1	1g

## Deuterated Poly (methyl methacrylate) d5

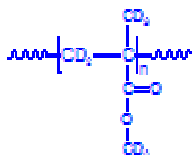


P18890-d5PMMA	Mn x 10 <sup>3</sup> : 3.5	Mw/Mn : 1.03	1g
P8210-d5PMMA	Mn x 10 <sup>3</sup> : 7	Mw/Mn : 1.08	1g
P14053-d5PMMA	Mn x 10 <sup>3</sup> : 23.5	Mw/Mn : 1.1	1g
P1154-d5PMMA	Mn x 10 <sup>3</sup> : 26.8	Mw/Mn : 1.03	1g
P3652-d5PMMA	Mn x 10 <sup>3</sup> : 28	Mw/Mn : 1.04	1g
P14054-d5PMMA	Mn x 10 <sup>3</sup> : 30.7	Mw/Mn : 1.09	1g
P1529-d5PMMA	Mn x 10 <sup>3</sup> : 56	Mw/Mn : 1.03	1g
P4266-d5PMMA	Mn x 10 <sup>3</sup> : 68	Mw/Mn : 1.25	1g
P10226-d5PMMA	Mn x 10 <sup>3</sup> : 820	Mw/Mn : 1.9	1g
P19276A-d5PMMA	Mn x 10 <sup>3</sup> : 992	Mw/Mn : 1.26	1g

## Deuterated Poly (methyl methacrylate) d8-atactic rich microstructure

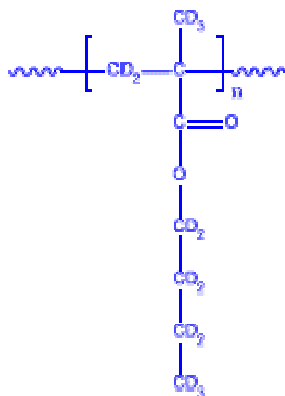
P9777--dPMMA	Mn x 10 <sup>3</sup> : 2.6	Mw/Mn : 1.18	0.5g
P19808-dPMMA	Mn x 10 <sup>3</sup> : 8.5	Mw/Mn : 1.1	0.5g
P40242A-dPMMA	Mn x 10 <sup>3</sup> : 29	Mw/Mn : 1.27	0.5g
P40243B-dPMMA	Mn x 10 <sup>3</sup> : 29.5	Mw/Mn : 1.58	0.5g
P9719-dPMMA	Mn x 10 <sup>3</sup> : 32.5	Mw/Mn : 1.46	0.5g
P19314--dPMMA	Mn x 10 <sup>3</sup> : 36	Mw/Mn : 1.09	0.5g
P40241-dPMMA	Mn x 10 <sup>3</sup> : 52	Mw/Mn : 1.16	0.5g
P19315--dPMMA	Mn x 10 <sup>3</sup> : 55	Mw/Mn : 1.13	0.5g
P19378B-dPMMA	Mn x 10 <sup>3</sup> : 64.5	Mw/Mn : 1.6	0.5g
P14893B-dPMMA	Mn x 10 <sup>3</sup> : 65	Mw/Mn : 2.11	0.5g
P40242-dPMMA	Mn x 10 <sup>3</sup> : 66.5	Mw/Mn : 1.21	0.5g
P40243-dPMMA	Mn x 10 <sup>3</sup> : 67	Mw/Mn : 1.2	0.5g
P40243A-dPMMA	Mn x 10 <sup>3</sup> : 79	Mw/Mn : 1.15	0.5g
P40251-dPMMA	Mn x 10 <sup>3</sup> : 90.5	Mw/Mn : 1.09	0.5g
P40252-dPMMA	Mn x 10 <sup>3</sup> : 174	Mw/Mn : 1.9	0.5g
P14893C-dPMMA	Mn x 10 <sup>3</sup> : 182	Mw/Mn : 1.26	0.5g
P19395-dPMMA	Mn x 10 <sup>3</sup> : 229	Mw/Mn : 1.14	0.5g
P14893-dPMMA	Mn x 10 <sup>3</sup> : 316	Mw/Mn : 1.35	0.5g
P19378A-dPMMA	Mn x 10 <sup>3</sup> : 388	Mw/Mn : 1.17	0.5g

## Deuterated Poly (methyl methacrylate) d8-syndiotactic rich microstructure



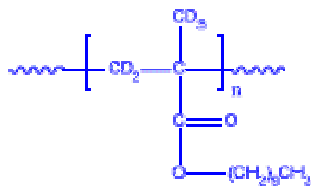
P3668-dPMMA	$M_n \times 10^3 : 12.5$	Mw/Mn : 1.04	1g
P6846A-dPMMA	$M_n \times 10^3 : 22$	Mw/Mn : 1.15	1g
P6846-dPMMA	$M_n \times 10^3 : 25$	Mw/Mn : 1.08	1g
P3667-dPMMA	$M_n \times 10^3 : 32$	Mw/Mn : 1.06	1g
P19571-dPMMA	$M_n \times 10^3 : 34$	Mw/Mn : 1.5	1g
P4488-dPMMA	$M_n \times 10^3 : 35$	Mw/Mn : 1.08	1g
P18751-dPMMA	$M_n \times 10^3 : 68$	Mw/Mn : 1.12	1g
P18896-dPMMA	$M_n \times 10^3 : 71$	Mw/Mn : 1.06	1g
P18742A-dPMMA	$M_n \times 10^3 : 100.5$	Mw/Mn : 1.09	1g
P18742B-dPMMA	$M_n \times 10^3 : 106.5$	Mw/Mn : 1.13	1g
P19737-dPMMA	$M_n \times 10^3 : 131.5$	Mw/Mn : 1.4	1g
P10165-dPMMA	$M_n \times 10^3 : 150$	Mw/Mn : 1.15	1g
P1190-dPMMA	$M_n \times 10^3 : 174$	Mw/Mn : 1.09	1g
P3839-dPMMA	$M_n \times 10^3 : 174.5$	Mw/Mn : 1.12	1g
P2707-dPMMA	$M_n \times 10^3 : 184.3$	Mw/Mn : 1.15	1g
P2708-dPMMA	$M_n \times 10^3 : 184.4$	Mw/Mn : 1.24	1g
P10162A-dPMMA	$M_n \times 10^3 : 278$	Mw/Mn : 1.2	1g
P10162-dPMMA	$M_n \times 10^3 : 445$	Mw/Mn : 1.5	1g
P10177-dPMMA	$M_n \times 10^3 : 450$	Mw/Mn : 1.13	1g
P10178-dPMMA	$M_n \times 10^3 : 520$	Mw/Mn : 1.4	1g

## Deuterated Poly (n-butyl methacrylate) d14



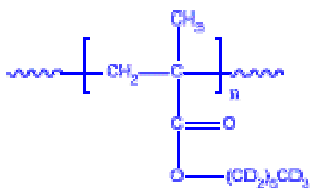
P6397-d14PnBuMA	$M_n \times 10^3 : 15$	Mw/Mn : 1.06	1g
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## Deuterated Poly (n-decyl methacrylate) (d5)



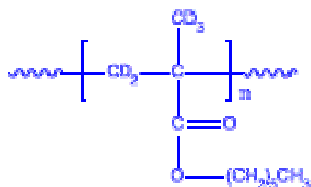
P6400-d5PDCMA	$M_n \times 10^3$ : 4.5	Mw/Mn : 1.3	1g
P6405-d5PDCMA	$M_n \times 10^3$ : 48	Mw/Mn : 3.2	1g

## Deuterated Poly (n-hexyl methacrylate) (d13)

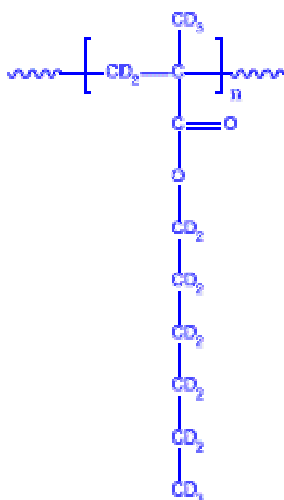


P8906A-d13PnHMA	$M_n \times 10^3$ : 9	Mw/Mn : 1.4	1g
P8906-d13PnHMA	$M_n \times 10^3$ : 14.5	Mw/Mn : 1.06	1g
P8907-d13PnHMA	$M_n \times 10^3$ : 17.5	Mw/Mn : 1.17	1g

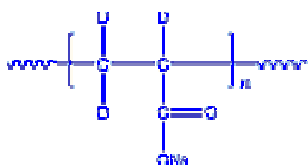
## Deuterated Poly (n-hexyl methacrylate) (d5)



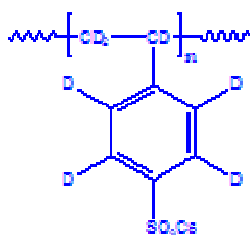
P8127A-dPnHMA	$M_n \times 10^3$ : 20	Mw/Mn : 2	0.5g
P8127-d5PnHMA	$M_n \times 10^3$ : 90	Mw/Mn : 1.28	0.5g

**Deuterated Poly (n-hexyl methacrylate) d18**

P6399-d18PnHMA	$M_n \times 10^3 : 15$	$M_w/M_n : 1.07$	0.5g
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**Deuterated Poly (sodium arylate) (d3)**

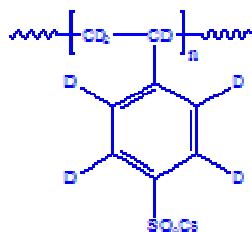
P5648A-d3PANa	$M_n \times 10^3 : 10.2$	$M_w/M_n : 4.8$	0.5g
P11083A-d3PANa	$M_n \times 10^3 : 94$	$M_w/M_n : 1.14$	0.5g

**Deuterated Poly (styrene sulfonic acid cesium salt)**

Comments: UNDIALYSED FORM

P2323-dPUSSO3Cs	$M_n \times 10^3 : 10$	$M_w/M_n : 1.05$	1g
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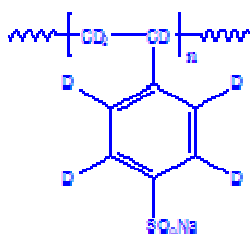
## Deuterated Poly (styrene sulfonic acid cesium salt)



Comments: DIALYSED FORM

P2323-dPSSO3Cs	$M_n \times 10^3 : 10$	Mw/Mn : 1.05	1g
P2318-dPSSO3Cs	$M_n \times 10^3 : 50.5$	Mw/Mn : 1.04	1g

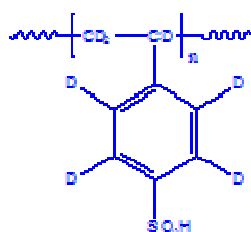
## Deuterated Poly (styrene sulfonic acid sodium salt)



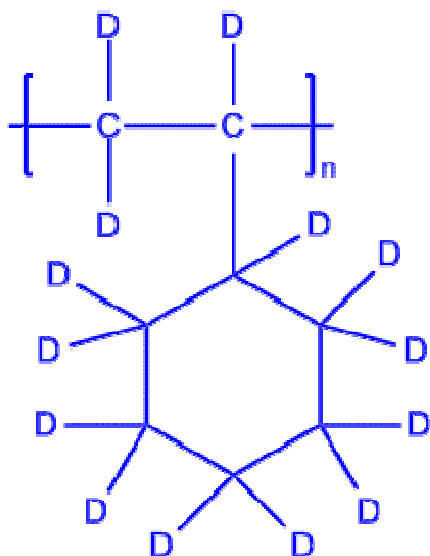
Comments: DIALYSED FORM

P9770-dPSSO3Na	$M_n \times 10^3 : 59$	Mw/Mn : 1.05	1g
P9768-dPSSO3Na	$M_n \times 10^3 : 63$	Mw/Mn : 1.04	1g
P8859-dPSSO3Na	$M_n \times 10^3 : 105$	Mw/Mn : 1.05	1g
P8759-dPSSO3Na	$M_n \times 10^3 : 1,175$	Mw/Mn : 1.09	1g

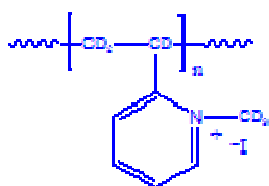
## Deuterated Poly (styrene sulfonic acid)



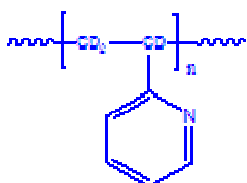
P2324-dPSSO3H	$M_n \times 10^3 : 32.5$	Mw/Mn : 1.05	1g
P40412-dPSSO3H	$M_n \times 10^3 : 34$	Mw/Mn : 1.08	1g
P4123-dPSSO3H	$M_n \times 10^3 : 63$	Mw/Mn : 1.07	1g
P8859-dPSSO3H	$M_n \times 10^3 : 94$	Mw/Mn : 1.05	1g
P7022-dPSSO3H	$M_n \times 10^3 : 373$	Mw/Mn : 1.15	1g

**Deuterated Poly vinyl cyclohexane (d14)**

P11029-d14VCH	Mn x 10 <sup>3</sup> : 146	Mw/Mn : 1.1	0.5g
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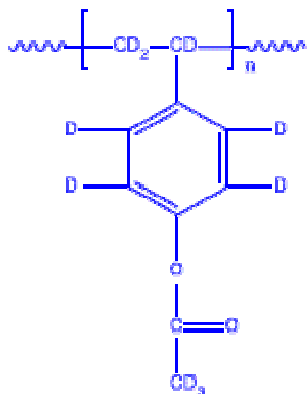
**Deuterated Poly(2-vinyl N-methylpyridinium iodide) (d6)**

P2959-d3P2VPQ	Mn x 10 <sup>3</sup> : 45	Mw/Mn : 1.04	1g
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**Deuterated Poly(2-vinyl pyridine) (d3)**

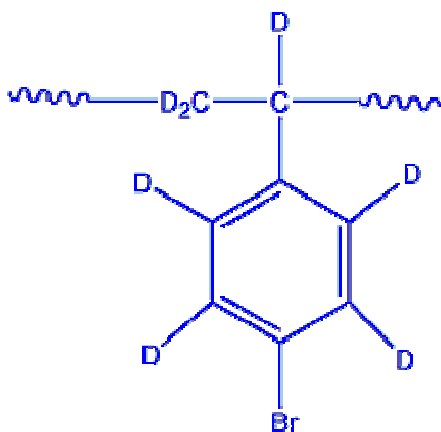
P18877-d3P2VP	Mn x 10 <sup>3</sup> : 27	Mw/Mn : 1.1	1g
P18878A-d3P2VP	Mn x 10 <sup>3</sup> : 27.5	Mw/Mn : 1.16	1g
P18878-d3P2VP	Mn x 10 <sup>3</sup> : 33.5	Mw/Mn : 1.06	1g
P40449-d3P2VP	Mn x 10 <sup>3</sup> : 39	Mw/Mn : 1.16	1g
P18879A-d32Vp	Mn x 10 <sup>3</sup> : 53	Mw/Mn : 1.19	1g
P18880-d3P2VP	Mn x 10 <sup>3</sup> : 55	Mw/Mn : 1.12	1g
P18879-d3P2VP	Mn x 10 <sup>3</sup> : 60	Mw/Mn : 1.12	1g
P14779-d3P2VP	Mn x 10 <sup>3</sup> : 92.5	Mw/Mn : 1.16	1g
P40296-d3P2VP	Mn x 10 <sup>3</sup> : 271	Mw/Mn : 1.4	1g
P16121P-d3P2VP	Mn x 10 <sup>3</sup> : 345.5	Mw/Mn : 1.5	1g

## Deuterated Poly(4-acetoxy styrene) (d10)



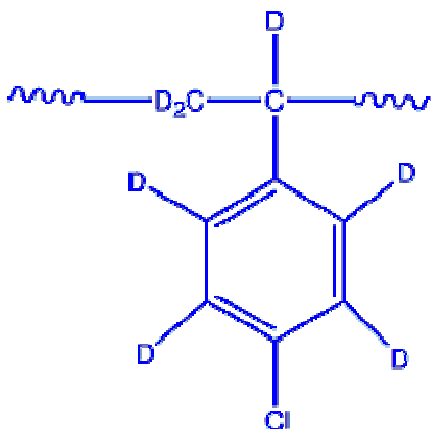
P8145-d10AcS	$M_n \times 10^3 : 8$	Mw/Mn : 1.25	0.5g
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## Deuterated Poly(4-bromo styrene) (d7)

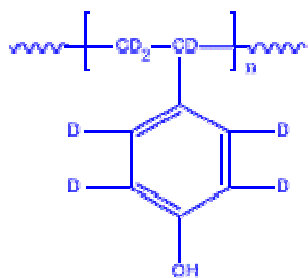


P14015-d7PBrS	$M_n \times 10^3 : 8$	Mw/Mn : 1.15	1g
P14020-d7PBrS	$M_n \times 10^3 : 17.5$	Mw/Mn : 1.15	1g

## Deuterated Poly(4-chloro styrene) (d7)



P14062-d7P4ClS	$M_n \times 10^3 : 6$	Mw/Mn : 1.09	1g
P14061-d7P4ClS	$M_n \times 10^3 : 12$	Mw/Mn : 1.1	1g
P14068-d7P4ClS	$M_n \times 10^3 : 24$	Mw/Mn : 1.2	1g

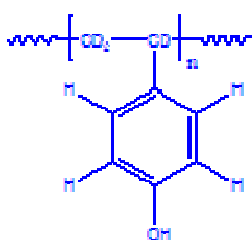
**Deuterated Poly(4-hydroxy styrene) (d7)**

P8141C-d7-OHS

Mn x 10<sup>3</sup> : 6.2

Mw/Mn : 1.25

0.5g

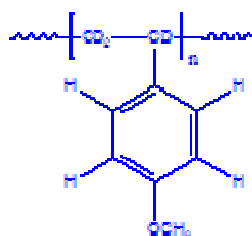
**Deuterated Poly(4-hydroxyl styrene) (d3)**

P2667-dHOST

Mn x 10<sup>3</sup> : 8.75

Mw/Mn : 1.07

1g

**Deuterated Poly(4-methoxy styrene) (d3)**

P2677-d3MeOS

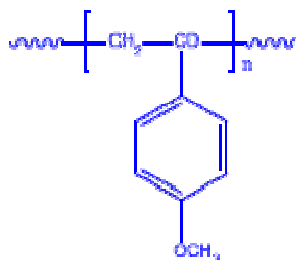
Mn x 10<sup>3</sup> : 19.7

Mw/Mn : 1.07

1g

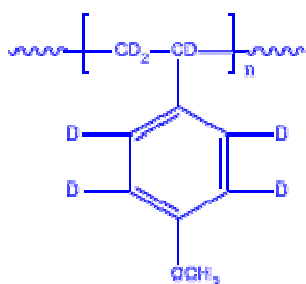


## Deuterated Poly(4-methoxy styrene) (d1)



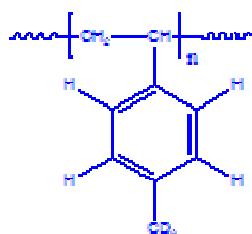
P8121A-d1P4MeOs	$M_n \times 10^3 : 0.6$	Mw/Mn : 1.3	0.5g
P8121C-d1P4MeOS	$M_n \times 10^3 : 0.8$	Mw/Mn : 1.2	0.5g
P8121B-d1P4MeOS	$M_n \times 10^3 : 0.9$	Mw/Mn : 1.2	0.5g
P8140A-d1P4MeOS	$M_n \times 10^3 : 2$	Mw/Mn : 1.2	0.5g
P8121F2-d1P4MeOS	$M_n \times 10^3 : 29$	Mw/Mn : 1.3	0.5g
P8140B-d1P4MeOS	$M_n \times 10^3 : 44.5$	Mw/Mn : 1.2	0.5g
P8121F1-d1P4MeOS	$M_n \times 10^3 : 122$	Mw/Mn : 1.4	0.5g

## Deuterated Poly(4-methoxy styrene) (d7)



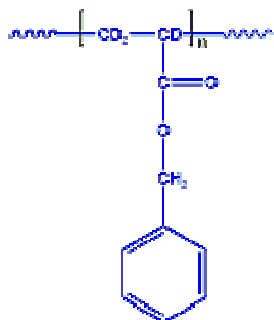
P8117A-d7P4MeOS	$M_n \times 10^3 : 0.9$	Mw/Mn : 1.3	1g
P8178A-d7P4MeOS	$M_n \times 10^3 : 1$	Mw/Mn : 1.3	1g
P8178B-d7P4MeOS	$M_n \times 10^3 : 1$	Mw/Mn : 1.3	1g
P8117B-d7P4MeOS	$M_n \times 10^3 : 1.2$	Mw/Mn : 1.3	1g
P8141B-d7P4MeOS	$M_n \times 10^3 : 1.3$	Mw/Mn : 1.3	1g
P8178-d7P4MeOS	$M_n \times 10^3 : 4$	Mw/Mn : 1.15	1g
P8141A-d7P4MeOS	$M_n \times 10^3 : 7$	Mw/Mn : 1.25	1g

## Deuterated Poly(4-methyl (d3) styrene)



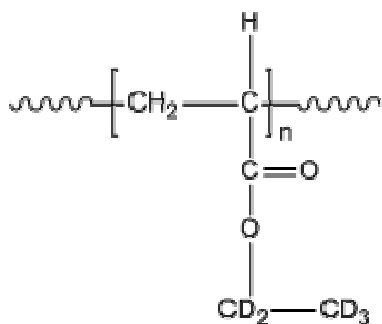
P1407-Pd3MeS	$M_n \times 10^3 : 0.8$	Mw/Mn : 1.25	1g
P1421-Pd3MeS	$M_n \times 10^3 : 1.5$	Mw/Mn : 1.13	1g
P1422-Pd3MeS	$M_n \times 10^3 : 4.4$	Mw/Mn : 1.05	1g

## Deuterated Poly(benzyl acrylate) (d3)



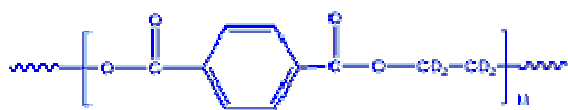
P6565-d3PBzA	$M_n \times 10^3 : 2.2$	Mw/Mn : 1.3	0.5g
P6566-d3PBzA	$M_n \times 10^3 : 7.5$	Mw/Mn : 1.3	0.5g

## Deuterated Poly(ethylacrylate) (d5) ester moiety deuterated



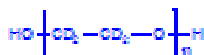
P10813C-d5PEA	$M_n \times 10^3 : 1.8$	Mw/Mn : 1.5	0.5g
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## Deuterated Poly(ethylene (d4) terephthalate)



P3416- d4PET	$M_n \times 10^3 : 72$	Mw/Mn : broad	1g
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## Deuterated Poly(ethylene glycol) Dihydroxy Terminated

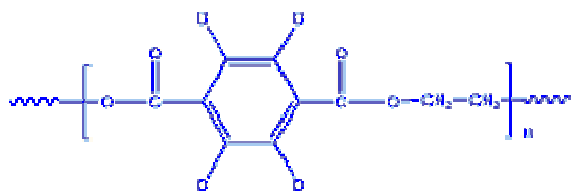


P19962-dPEO	$M_n \times 10^3 : 0.44$	Mw/Mn : 1.18	1g
P4837-dPEO	$M_n \times 10^3 : 2.7$	Mw/Mn : 1.28	1g
P4836-dPEO	$M_n \times 10^3 : 3.5$	Mw/Mn : 1.17	1g
P4855-dPEO	$M_n \times 10^3 : 4.6$	Mw/Mn : 1.09	1g
P4927-dPEO	$M_n \times 10^3 : 4.8$	Mw/Mn : 1.09	1g
P3340-dPEO	$M_n \times 10^3 : 6$	Mw/Mn : 1.2	1g
P4924-dPEO	$M_n \times 10^3 : 8$	Mw/Mn : 1.12	1g
P4432-dPEO	$M_n \times 10^3 : 8.5$	Mw/Mn : 1.2	1g
P19960-dPEO	$M_n \times 10^3 : 8.5$	Mw/Mn : 1.1	1g
P6092-dPEO	$M_n \times 10^3 : 11.2$	Mw/Mn : 1.1	1g
P2815A-dPEO	$M_n \times 10^3 : 13.5$	Mw/Mn : 1.25	1g
P3796-dPEO	$M_n \times 10^3 : 14$	Mw/Mn : 1.09	1g
P3801-dPEO	$M_n \times 10^3 : 17$	Mw/Mn : 1.07	1g
P8396-dPEO	$M_n \times 10^3 : 17$	Mw/Mn : 1.15	1g
P8397-dPEO	$M_n \times 10^3 : 22$	Mw/Mn : 1.09	1g
P4111-dPEO	$M_n \times 10^3 : 25$	Mw/Mn : 1.08	1g
P5601-dPEO	$M_n \times 10^3 : 35$	Mw/Mn : 1.09	1g

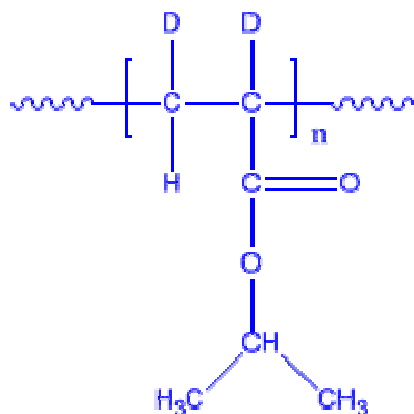
## Deuterated poly(ethylene glycol) tert-octylphenyl ether, ω-hydroxy-terminated

P40492-dPEO-TOP	$M_n \times 10^3 : 0.54$	Mw/Mn : 1.08	PEO is completely deuterated	1g
P40294-dPEO-TOPE	$M_n \times 10^3 : 0.67$	Mw/Mn : 1.08	PEO is partially deuterated	1g
P40492A-dPEO-HEO-TOP	$M_n \times 10^3 : 0.7$	Mw/Mn : 1.08	PEO is partially deuterated	1g

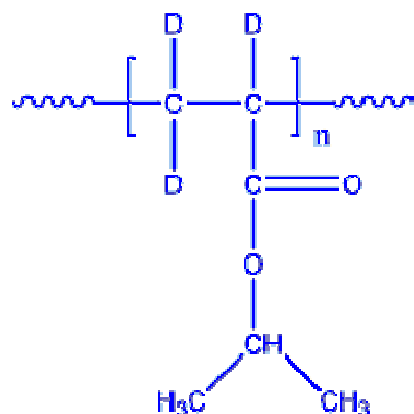
## Deuterated Poly(ethylene terephthalate (d4))



P3440-d4PET	$M_n \times 10^3 : 40$	Mw/Mn : broad	1g
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**Deuterated Poly(isopropyl acrylate) (d2)**

P6569-d2IPrA	$M_n \times 10^3$ : 88.9	Mw/Mn : 2.75	0.5g
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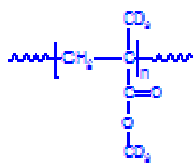
**Deuterated Poly(isopropyl acrylate) (d3)**

P9153B-d3IPrA	$M_n \times 10^3$ : 1.8	Mw/Mn : 1.4	0.5g
P9153-d3IPrA	$M_n \times 10^3$ : 2.2	Mw/Mn : 1.6	0.5g
P9163A-d3PIPRA	$M_n \times 10^3$ : 6	Mw/Mn : 1.2	0.5g
P9145-d3IPrA	$M_n \times 10^3$ : 12	Mw/Mn : 1.5	0.5g
P9163b-d3PIPRA	$M_n \times 10^3$ : 40	Mw/Mn : broad	0.5g

**Deuterated poly(methacrylonitrile-d5)**

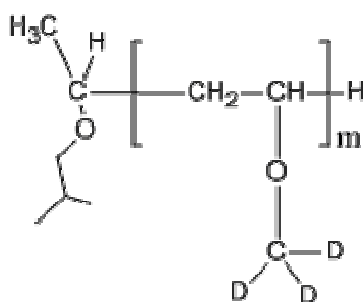
P16140-d5MACN	$M_n \times 10^3$ : 645	Mw/Mn : 1.45	0.5g
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## Deuterated Poly(methyl methacrylate) (d6)



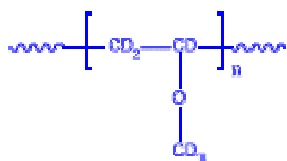
P14050-d6PMMA	$M_n \times 10^3 : 2$	Mw/Mn : 1.2	1g
P14051-d6PMMA	$M_n \times 10^3 : 7$	Mw/Mn : 1.06	1g
P6190-d6PMMA	$M_n \times 10^3 : 21.8$	Mw/Mn : 1.05	1g
P6191-d6PMMA	$M_n \times 10^3 : 41.3$	Mw/Mn : 1.04	1g
P9713-d6PMMA	$M_n \times 10^3 : 45$	Mw/Mn : 1.1	1g

## Deuterated Poly(methyl vinyl ether) (d3)



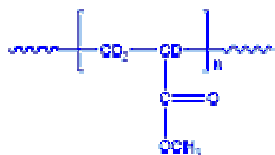
P19925-d3MVE	$M_n \times 10^3 : 10.5$	Mw/Mn : 1.1	1g
P19957-d3MVE	$M_n \times 10^3 : 15.5$	Mw/Mn : 1.14	1g
P19955-d3MVE	$M_n \times 10^3 : 16$	Mw/Mn : 1.14	1g
P19916-d3MVE	$M_n \times 10^3 : 30$	Mw/Mn : 1.15	1g

## Deuterated Poly(methyl vinyl ether) (d6)



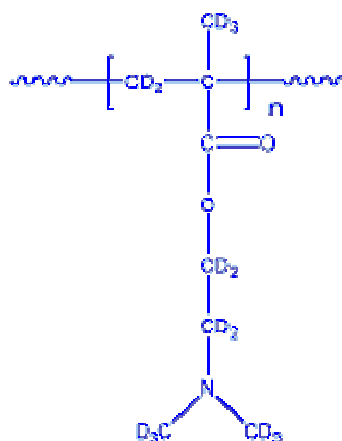
P8344-d6MVE	$M_n \times 10^3 : 14.5$	Mw/Mn : 1.15	0.5g
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## Deuterated Poly(methylacrylate) (d3) Vinyl group deuterated



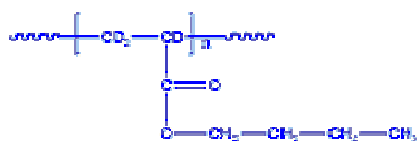
P5659-d3MA	$M_n \times 10^3 : 4$	Mw/Mn : 1.6	0.5g
P10806-d3PMA	$M_n \times 10^3 : 30$	Mw/Mn : 1.6	0.5g
P5498A-d3PMA	$M_n \times 10^3 : 33$	Mw/Mn : 2.5	0.5g

## Deuterated Poly(N,N-dimethylaminoethylmethacrylate) d15

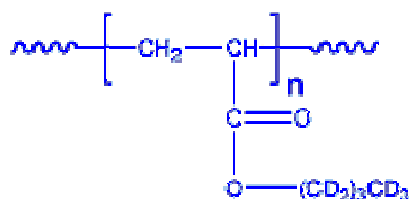


P4632-d15NNDMEMA	$M_n \times 10^3 : 80$	Mw/Mn : 2	1g
P14460-d15NNDMEMA	$M_n \times 10^3 : 90$	Mw/Mn : 1.8	1g

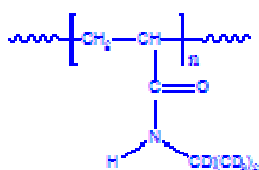
## Deuterated Poly(n-butylacrylate) (d3)



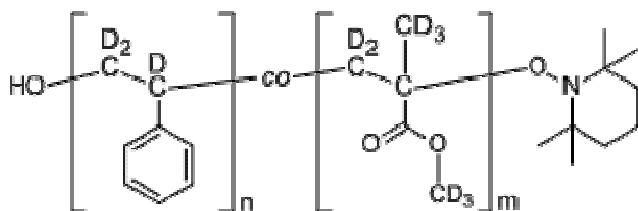
P5648d-d3nBuA	$M_n \times 10^3 : 5$	Mw/Mn : 3.8	0.5g
P5648B-d3nBuA	$M_n \times 10^3 : 14$	Mw/Mn : 4.8	0.5g
P5648C-d3nBuA	$M_n \times 10^3 : 15$	Mw/Mn : 3.4	0.5g

**Deuterated Poly(n-butylacrylate) (d9)**

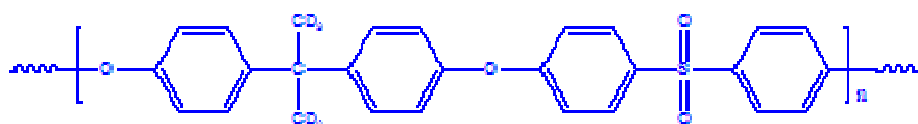
詳細についてはお問合せ下さい。

**Deuterated Poly(N-isopropyl acrylamide) d7**

P14778A-d7NIPAM	Mn x 10 <sup>3</sup> : 14	Mw/Mn : 3.8	1g
P14778-d7NIPAM	Mn x 10 <sup>3</sup> : 208	Mw/Mn : 1.5	1g
P1519- d7NIPAM	Mn x 10 <sup>3</sup> : 415.4	Mw/Mn : 3.28	1g
P10785- d7NIPAM	Mn x 10 <sup>3</sup> : 545	Mw/Mn : 1.26	1g

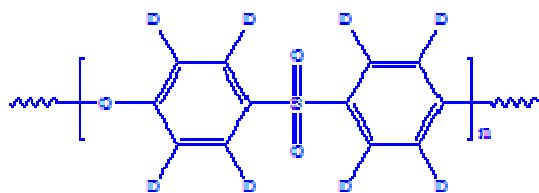
**Deuterated poly(styrene-co-methyl methacrylate) random copolymer, α-Hydroxy,ω-TEMPO-terminated**

P19336-dPSMMAran-OHT	Mn x 10 <sup>3</sup> : 9	Mw/Mn : 1.11	0.5g
P19336A-dPSMMAran-OHT	Mn x 10 <sup>3</sup> : 82	Mw/Mn : 1.13	0.5g

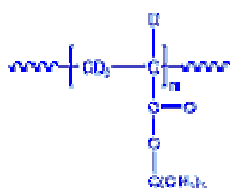
**Deuterated Poly(sulfone ether) (d6)**

Comments: \* Partially deuterated bisphenol-d6

P1765-d6PSFE	Mn x 10 <sup>3</sup> : 28	Mw/Mn : 1.7	1g
P1757-d6PSFE*	Mn x 10 <sup>3</sup> : 30	Mw/Mn : 2.6	1g

**Deuterated Poly(sulfone ether) (d8)**

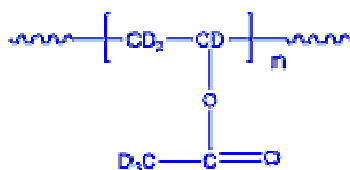
P3518-d8PSFE	$M_n \times 10^3 : 4$	Mw/Mn : 1.5	1g
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**1. 1. 7. Deuterated Poly(tert-butylacrylate) (d3)**

P5648D-d3tBuA	$M_n \times 10^3 : 5$	Mw/Mn : 3.4	0.5g
P5648-d3tBuA	$M_n \times 10^3 : 6$	Mw/Mn : 1.45	0.5g
P5648C-d3tBuA	$M_n \times 10^3 : 15$	Mw/Mn : 3.4	0.5g
P40178A-d3tBuA	$M_n \times 10^3 : 78$	Mw/Mn : 1.16	0.5g
P11083-d3tBuA	$M_n \times 10^3 : 127.4$	Mw/Mn : 1.14	0.5g

**Deuterated Poly(tert-butylacrylate) (d9)**

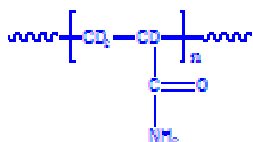
P4617-d9tBuA	$M_n \times 10^3 : 1.2$	Mw/Mn : 2	0.5g
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**Deuterated Poly(vinyl acetate) (d6)**

P8553A-dPVAC	$M_n \times 10^3 : 6.9$	Mw/Mn : 1.25	0.5g
P8553B-dPVAC	$M_n \times 10^3 : 22$	Mw/Mn : 1.35	0.5g



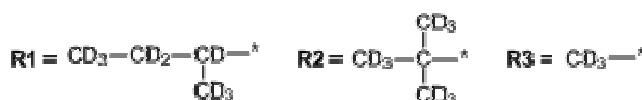
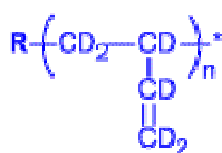
## Deuterated Polyacrylamide d3



Comments: \*Viscosity measurement in water at 25 degrees C

P9298-d3PAMD	Mn x 10 <sup>3</sup> : 1	Mw/Mn : 1.3	0.5g
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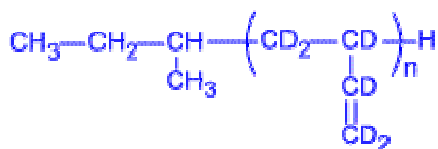
## Deuterated Polybutadiene (1, 2 addition) - completely deuterated (incl.end-group)



Comments: R1 = (d) sec-Bu; R2 = (d) tret-Bu; R3 = (d) Me.

P18559-dBd	Mn x 10 <sup>3</sup> : 2.2	Mw/Mn : 1.09	End-group: R1 (sec-Bu)	1g
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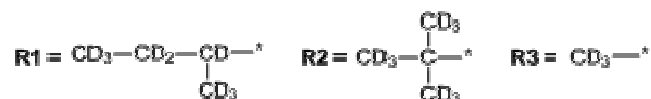
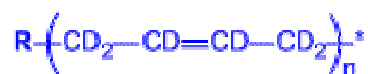
## Deuterated Polybutadiene (1, 2 addition) - protonated end-groups



Comments: 1,2-addition &gt; 85%

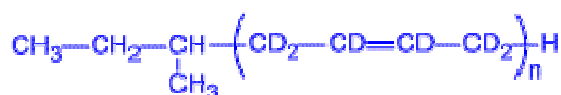
P3662-dPBd	Mn x 10 <sup>3</sup> : 1.1	Mw/Mn : 1.09		1g
P3813-dPBd	Mn x 10 <sup>3</sup> : 1.4	Mw/Mn : 1.1		1g
P18168-dBd	Mn x 10 <sup>3</sup> : 4.2	Mw/Mn : 1.09	1,2-addition > 80%	1g
P2377-dPBd	Mn x 10 <sup>3</sup> : 68	Mw/Mn : 1.05		1g
P2364-dPBd	Mn x 10 <sup>3</sup> : 72	Mw/Mn : 1.08		1g
P1450-dBd	Mn x 10 <sup>3</sup> : 400	Mw/Mn : 1.1	1,2-addition > 20%	1g
P1446-dBd	Mn x 10 <sup>3</sup> : 750	Mw/Mn : 1.2	1,2-addition > 20%	1g

## Deuterated Polybutadiene (1, 4 addition) - completely deuterated (incl.end-group)



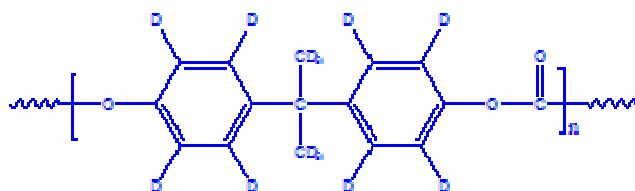
詳細についてはお問合せ下さい。

## Deuterated Polybutadiene (1, 4 addition) - protonated end-groups

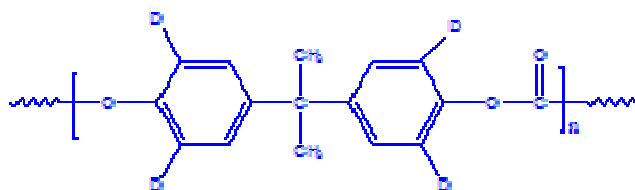


P3862-dPBd1	Mn x 10 <sup>3</sup> : 1.35	Mw/Mn : 1.12	1g
P18307-dPBd1	Mn x 10 <sup>3</sup> : 1.4	Mw/Mn : 1.09	1g
P19043A-dPBd	Mn x 10 <sup>3</sup> : 20.5	Mw/Mn : 1.06	1g
P19556-dPBd	Mn x 10 <sup>3</sup> : 24.5	Mw/Mn : 1.27	1g
P18308A-dPBd	Mn x 10 <sup>3</sup> : 31	Mw/Mn : 1.06	1g
P19006-dBd	Mn x 10 <sup>3</sup> : 62	Mw/Mn : 1.09	1g
P19557-dPBd	Mn x 10 <sup>3</sup> : 66	Mw/Mn : 1.11	1g
P2482-dPBd1	Mn x 10 <sup>3</sup> : 75	Mw/Mn : 1.06	1g
P18316-dPBd1	Mn x 10 <sup>3</sup> : 82.5	Mw/Mn : 1.08	1g
P5912A-dPBd	Mn x 10 <sup>3</sup> : 160	Mw/Mn : 1.6	1g
P19558-dPBd	Mn x 10 <sup>3</sup> : 166	Mw/Mn : 1.27	1g
P1818-dPBd1	Mn x 10 <sup>3</sup> : 285	Mw/Mn : 1.09	1g
P1797-dPBd2	Mn x 10 <sup>3</sup> : 325	Mw/Mn : 1.12	1g
P5912-dPBd	Mn x 10 <sup>3</sup> : 1,500	Mw/Mn : 1.3	1g

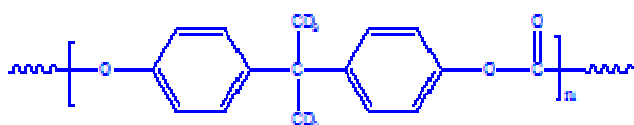
## Deuterated Polycarbonate (d14)



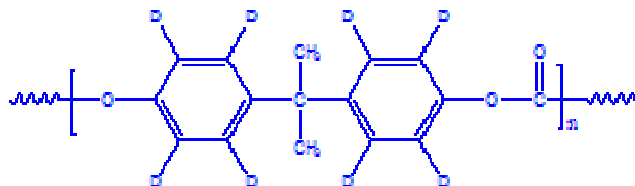
P9205-d14PC	Mn x 10 <sup>3</sup> : 5.5	Mw/Mn : 1.5	0.5g
P9186-d14PC	Mn x 10 <sup>3</sup> : 7	Mw/Mn : 2.1	0.5g
P9789A-d14PC	Mn x 10 <sup>3</sup> : 7.7	Mw/Mn : 2.2	0.5g
P9180-d14PC	Mn x 10 <sup>3</sup> : 10.5	Mw/Mn : 2.1	0.5g
P9178-d14PC	Mn x 10 <sup>3</sup> : 16.8	Mw/Mn : 2.4	0.5g

**Deuterated Polycarbonate (d4)**

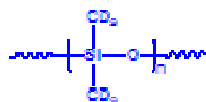
P1710-d4PC	Mn x 10 <sup>3</sup> : 26	Mw/Mn : 1.97	1g
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**Deuterated Polycarbonate (d6)**

P2436-d6PC	Mn x 10 <sup>3</sup> : 4.5	Mw/Mn : 1.7	1g
P2648-d6PC	Mn x 10 <sup>3</sup> : 25.3	Mw/Mn : 1.88	1g

**Deuterated Polycarbonate (d8)**

P2614-d8PC	Mn x 10 <sup>3</sup> : 21.7	Mw/Mn : 1.9	0.5g
P2611-d8PC	Mn x 10 <sup>3</sup> : 26.4	Mw/Mn : 1.8	0.5g

**Deuterated Polydimethylsiloxane**

Comments: \* silanol terminated

P18683A-dPDMS	Mn x 10 <sup>3</sup> : 5.5	Mw/Mn : 1.5	1g
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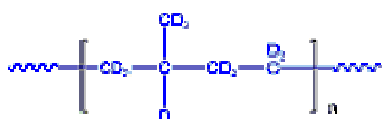
## Deuterated Polyethylene (d4)



Comments: Polymers obtain by deuteration of 1,4 polybutadiene.

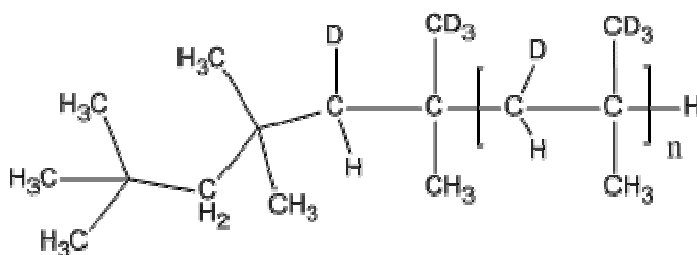
P19556A-dPE	Mn x 10 <sup>3</sup> : 25	Mw/Mn : 1.27	1g
P2480-dE	Mn x 10 <sup>3</sup> : 50	Mw/Mn : 1.06	1g
P8464-dPE	Mn x 10 <sup>3</sup> : 77	Mw/Mn : 1.03	1g
P5856-dPE	Mn x 10 <sup>3</sup> : 95.5	Mw/Mn : 1.08	1g
P18910A-dE	Mn x 10 <sup>3</sup> : 137	Mw/Mn : 1.06	1g
P40244-dPE	Mn x 10 <sup>3</sup> : 175	Mw/Mn : 1.34	1g

## Deuterated Polyethylene Propylene



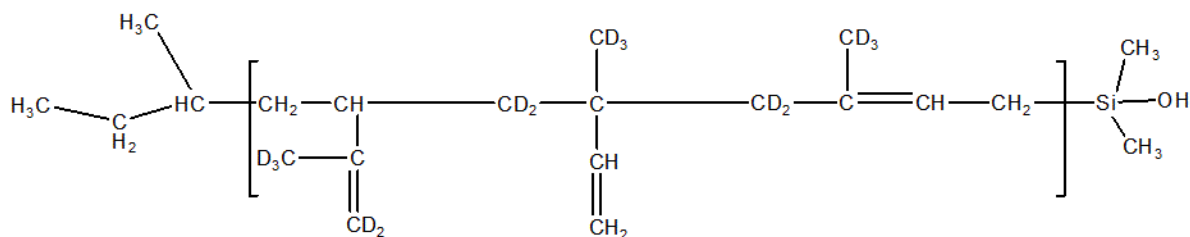
P9122A-dPrE	Mn x 10 <sup>3</sup> : 42	Mw/Mn : 1.2	1g
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## Deuterated Polyisobutylene



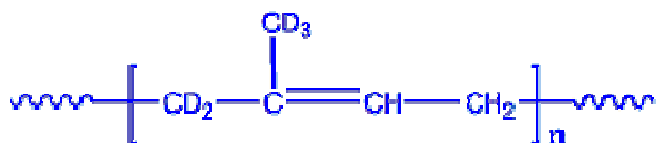
Comments: d4: partially deuterated polyisobutylene main chain; d8: completely deuterated polyisobutylene main chain.

P18639-d4PIb	Mn x 10 <sup>3</sup> : 0.9	Mw/Mn : 1.4	d4	0.5g
P18618-d8PIb	Mn x 10 <sup>3</sup> : 0.9	Mw/Mn : 1.4	d8	0.5g
P18651-d8PIb	Mn x 10 <sup>3</sup> : 2.2	Mw/Mn : 1.35	d8	0.5g

Deuterated polyisoprene (1,4-addition),  $\alpha$ -Silanol terminated

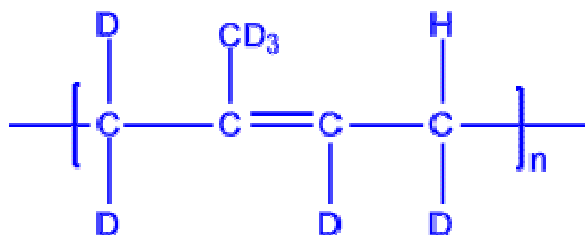
P19071A-d5IpSiOH	Mn x 10 <sup>3</sup> : 176	Mw/Mn : 1.06	1g
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## Deuterated Polyisoprene-d5(1, 4 addition)



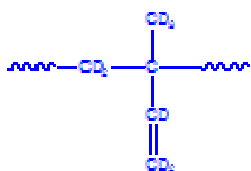
P19000-d5PIp	$M_n \times 10^3 : 0.6$	Mw/Mn : 1.05	1g
P19040A-d5Ip	$M_n \times 10^3 : 0.8$	Mw/Mn : 1.22	1g
P19028-d5Ip	$M_n \times 10^3 : 1.6$	Mw/Mn : 1.4	1g
P18987-d5PIp	$M_n \times 10^3 : 23$	Mw/Mn : 1.03	1g
P19071-d5Ip	$M_n \times 10^3 : 24.5$	Mw/Mn : 1.55	1g
P18960-d5PIp	$M_n \times 10^3 : 46$	Mw/Mn : 1.75	1g
P9902-d5PIP	$M_n \times 10^3 : 52$	Mw/Mn : 1.09	1g
P18987A-d5PIp	$M_n \times 10^3 : 76$	Mw/Mn : 1.05	1g
P19029-d5Ip	$M_n \times 10^3 : 110$	Mw/Mn : 1.28	1g
P18971-d5PIp	$M_n \times 10^3 : 140$	Mw/Mn : 1.07	1g
P19023-d5Ip	$M_n \times 10^3 : 145$	Mw/Mn : 1.05	1g
P19040-d5Ip	$M_n \times 10^3 : 263$	Mw/Mn : 1.18	1g
P19787-d5Ip	$M_n \times 10^3 : 402$	Mw/Mn : 2.22	1g

## Deuterated Polyisoprene-d7(1, 4 addition)



P10913-dIp	$M_n \times 10^3 : 3.7$	Mw/Mn : 1.19	1g
P10737-dIP	$M_n \times 10^3 : 17.5$	Mw/Mn : 1.03	1g

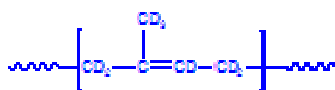
## Deuterated Polyisoprene-d8 (1, 2 addition)



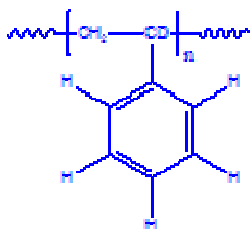
Comments: \*over 80% 1,2 and 3,4 addition

\*\* 50% 1,2 and 3,4 addition

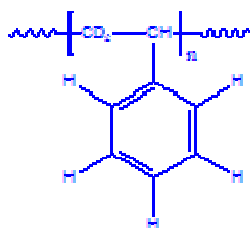
P6025B-dPIp	$M_n \times 10^3 : 4.1$	Mw/Mn : 1.1	*	1g
P6408-dPIp	$M_n \times 10^3 : 4.5$	Mw/Mn : 1.09	*	1g
P9922A-dPIp	$M_n \times 10^3 : 4.5$	Mw/Mn : 1.18	*	1g
P9922-dPIp	$M_n \times 10^3 : 14$	Mw/Mn : 1.18	*	1g
P6315-dPIp	$M_n \times 10^3 : 28.3$	Mw/Mn : 1.19	*	1g
P6172-dPIp	$M_n \times 10^3 : 58.5$	Mw/Mn : 1.05	**	1g

**Deuterated Polyisoprene-d8 (1, 4 addition)**

P9876A-dIp	Mn x 10 <sup>3</sup> : 2	Mw/Mn : 1.12	1g
P9876-dPiP	Mn x 10 <sup>3</sup> : 3	Mw/Mn : 1.12	1g

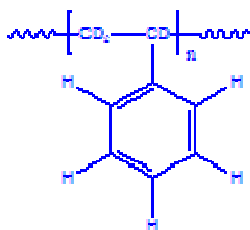
**Deuterated Polystyrene (d1)**

P4010-d1PS	Mn x 10 <sup>3</sup> : 4.6	Mw/Mn : 1.1	1g
P18131-d1PS	Mn x 10 <sup>3</sup> : 12	Mw/Mn : 1.15	1g
P18131A-d1PS	Mn x 10 <sup>3</sup> : 13	Mw/Mn : 1.15	1g
P14078-d1PS	Mn x 10 <sup>3</sup> : 15	Mw/Mn : 1.26	1g
P3693-d1PS	Mn x 10 <sup>3</sup> : 25.5	Mw/Mn : 1.04	1g
P3692-d1PS	Mn x 10 <sup>3</sup> : 40	Mw/Mn : 1.7	1g
P6045-d1PS	Mn x 10 <sup>3</sup> : 60	Mw/Mn : 1.03	1g
P6046-d1PS	Mn x 10 <sup>3</sup> : 114	Mw/Mn : 1.03	1g
P4011-d1PS	Mn x 10 <sup>3</sup> : 180	Mw/Mn : 2	1g

**Deuterated Polystyrene (d2)**

P2895-d2PS	Mn x 10 <sup>3</sup> : 39	Mw/Mn : 1.04	1g
P2896-d2PS	Mn x 10 <sup>3</sup> : 53	Mw/Mn : 1.04	1g

## Deuterated Polystyrene (d3)

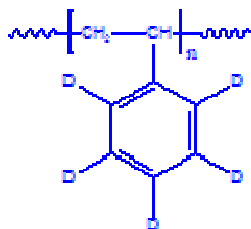


Comments: 1) deuterium % on the backbone >89%

2) deuterium % on the backbone >98%

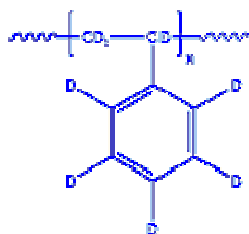
P1780-d3PS	Mn x 10 <sup>3</sup> : 2.1	Mw/Mn : 1.06	1	1g
P3696-d3PS	Mn x 10 <sup>3</sup> : 8	Mw/Mn : 1.4	1	1g
P3697-d3PS	Mn x 10 <sup>3</sup> : 10	Mw/Mn : 1.2	1	1g
P1783-d3PS	Mn x 10 <sup>3</sup> : 12.1	Mw/Mn : 1.03	1	1g
P1824-d3PS	Mn x 10 <sup>3</sup> : 15	Mw/Mn : 1.04	2	1g
P3698-d3PS	Mn x 10 <sup>3</sup> : 16	Mw/Mn : 1.15	1	1g
P1939-d3PS	Mn x 10 <sup>3</sup> : 17.1	Mw/Mn : 1.04	2	1g
P4366-d3PS	Mn x 10 <sup>3</sup> : 21	Mw/Mn : 1.06		1g
P2186-d3PS	Mn x 10 <sup>3</sup> : 21.8	Mw/Mn : 1.69		1g
P3699-d3PS	Mn x 10 <sup>3</sup> : 24	Mw/Mn : 1.12	1	1g
P2187-d3PS	Mn x 10 <sup>3</sup> : 63.5	Mw/Mn : 1.05	2	1g
P18727-d3dPS	Mn x 10 <sup>3</sup> : 90	Mw/Mn : 1.3		1g
P2194-d3PS	Mn x 10 <sup>3</sup> : 126.2	Mw/Mn : 1.09	2	1g
P18722-d3dPS	Mn x 10 <sup>3</sup> : 454	Mw/Mn : 1.4		1g
P18722-A-d3dPS	Mn x 10 <sup>3</sup> : 977	Mw/Mn : 1.14		1g

## Deuterated Polystyrene (d5)



P4362-d5PS	Mn x 10 <sup>3</sup> : 1.5	Mw/Mn : 4		1g
P1790-d5PS	Mn x 10 <sup>3</sup> : 4.5	Mw/Mn : 1.05		1g
P4367-d5PS	Mn x 10 <sup>3</sup> : 18	Mw/Mn : 1.08		1g
P19844-d5PS	Mn x 10 <sup>3</sup> : 26	Mw/Mn : 1.2		1g

## Deuterated Polystyrene (d8) for Complete deuterated analog see section: 1.10.17



P19015C-dPS	Mn x 10 <sup>3</sup> : 0.8	Mw/Mn : 1.25	1g
P19105C-dPS	Mn x 10 <sup>3</sup> : 0.8	Mw/Mn : 1.25	1g
P2015-dPS	Mn x 10 <sup>3</sup> : 0.88	Mw/Mn : 1.1	1g
P40447-dPS	Mn x 10 <sup>3</sup> : 0.9	Mw/Mn : 1.09	1g
P9863-dPS	Mn x 10 <sup>3</sup> : 2	Mw/Mn : 1.25	1g
P4415-dPS	Mn x 10 <sup>3</sup> : 2.2	Mw/Mn : 1.07	1g
P6787-dPS	Mn x 10 <sup>3</sup> : 4	Mw/Mn : 1.07	1g
P2002-dPs	Mn x 10 <sup>3</sup> : 4.5	Mw/Mn : 1.48	1g
P5555-dPS	Mn x 10 <sup>3</sup> : 6	Mw/Mn : 1.14	1g
P3588F2-dPS	Mn x 10 <sup>3</sup> : 6.7	Mw/Mn : 1.2	1g
P3637-dPS	Mn x 10 <sup>3</sup> : 7	Mw/Mn : 1.2	1g
P4992-dPS	Mn x 10 <sup>3</sup> : 7	Mw/Mn : 1.06	1g
P3644-dPS	Mn x 10 <sup>3</sup> : 8	Mw/Mn : 1.6	1g
P5995-dPS	Mn x 10 <sup>3</sup> : 8	Mw/Mn : 1.3	1g
P18459-dPS	Mn x 10 <sup>3</sup> : 8.8	Mw/Mn : 1.02	1g
P5814A-dPS	Mn x 10 <sup>3</sup> : 9	Mw/Mn : 1.25	1g
P14631-dPS	Mn x 10 <sup>3</sup> : 9	Mw/Mn : 1.18	1g
P3645-dPS	Mn x 10 <sup>3</sup> : 9	Mw/Mn : 1.2	1g
P18389-dPS	Mn x 10 <sup>3</sup> : 13	Mw/Mn : 1.02	1g
P5859D-dPS	Mn x 10 <sup>3</sup> : 14	Mw/Mn : 1.6	1g
P3620A-dPS	Mn x 10 <sup>3</sup> : 14.5	Mw/Mn : 1.9	1g
P2705-dPS	Mn x 10 <sup>3</sup> : 15	Mw/Mn : 1.04	1g
P18460-dPS	Mn x 10 <sup>3</sup> : 15.8	Mw/Mn : 1.04	1g
P18456-dPS	Mn x 10 <sup>3</sup> : 16.5	Mw/Mn : 1.04	1g
P19614-dPS	Mn x 10 <sup>3</sup> : 16.5	Mw/Mn : 1.11	1g
P3686D-dPS	Mn x 10 <sup>3</sup> : 17	Mw/Mn : 2.7	1g
P2786-2-dPS	Mn x 10 <sup>3</sup> : 18	Mw/Mn : 3.3	1g
P5554-dPs	Mn x 10 <sup>3</sup> : 20	Mw/Mn : 1.08	1g
P2786B-dPS	Mn x 10 <sup>3</sup> : 21	Mw/Mn : 3.7	1g
P2786-dPS	Mn x 10 <sup>3</sup> : 21.4	Mw/Mn : 3.7	1g
P15000-dPS	Mn x 10 <sup>3</sup> : 23	Mw/Mn : 1.07	1g
P4107-dPS	Mn x 10 <sup>3</sup> : 23	Mw/Mn : 1.06	1g
P3639-dPS	Mn x 10 <sup>3</sup> : 24	Mw/Mn : 1.5	1g
P9819-dPS	Mn x 10 <sup>3</sup> : 24	Mw/Mn : 1.07	1g
P19603-dPS	Mn x 10 <sup>3</sup> : 26.5	Mw/Mn : 1.04	1g
P18456A-dPS	Mn x 10 <sup>3</sup> : 28	Mw/Mn : 1.1	1g
P19603A-dPS	Mn x 10 <sup>3</sup> : 32.5	Mw/Mn : 1.15	1g
P3160-dPS	Mn x 10 <sup>3</sup> : 38.5	Mw/Mn : 1.07	1g
P14073-dPS	Mn x 10 <sup>3</sup> : 39	Mw/Mn : 1.14	1g
P4110-dPS	Mn x 10 <sup>3</sup> : 42	Mw/Mn : 1.07	1g
P5859C-dPS	Mn x 10 <sup>3</sup> : 42	Mw/Mn : 1.3	1g
P5859B-dPS	Mn x 10 <sup>3</sup> : 45	Mw/Mn : 1.3	1g
P4261-dPS	Mn x 10 <sup>3</sup> : 52	Mw/Mn : 1.09	1g
P19152B-dPS	Mn x 10 <sup>3</sup> : 54	Mw/Mn : 1.5	1g
P18390-dPS	Mn x 10 <sup>3</sup> : 61.5	Mw/Mn : 1.02	1g
P5859A-dPS	Mn x 10 <sup>3</sup> : 62	Mw/Mn : 1.25	1g

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前ページからの続き

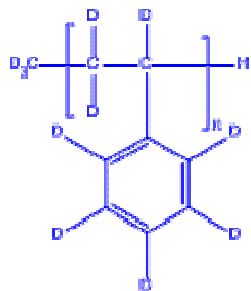
P14072-dPS	Mn x 10 <sup>3</sup> : 65	Mw/Mn : 1.05	1g
P11354B-dPS	Mn x 10 <sup>3</sup> : 70	Mw/Mn : 3.8	1g
P11354C-dPS	Mn x 10 <sup>3</sup> : 70	Mw/Mn : 3.3	1g
P4260-dPS	Mn x 10 <sup>3</sup> : 72	Mw/Mn : 1.15	1g
P9428-dPS	Mn x 10 <sup>3</sup> : 75	Mw/Mn : 1.18	1g
P3678F2-dPs	Mn x 10 <sup>3</sup> : 75	Mw/Mn : 6	1g
P6375-dPS	Mn x 10 <sup>3</sup> : 78	Mw/Mn : 1.15	1g
P4204-dPS	Mn x 10 <sup>3</sup> : 80	Mw/Mn : 1.05	1g
P4336-dPS	Mn x 10 <sup>3</sup> : 85	Mw/Mn : 1.09	1g
P3677-DpS	Mn x 10 <sup>3</sup> : 104	Mw/Mn : 1.06	1g
P4337-dPS	Mn x 10 <sup>3</sup> : 115	Mw/Mn : 1.09	1g
P2417-dPS	Mn x 10 <sup>3</sup> : 117.8	Mw/Mn : 1.11	1g
P14901-dPS	Mn x 10 <sup>3</sup> : 127	Mw/Mn : 1.13	1g
P2195-dPS	Mn x 10 <sup>3</sup> : 132	Mw/Mn : 1.06	1g
P3620C-dPS	Mn x 10 <sup>3</sup> : 137	Mw/Mn : 9	1g
P8796-dPS	Mn x 10 <sup>3</sup> : 138	Mw/Mn : 1.09	1g
P10188-dPS	Mn x 10 <sup>3</sup> : 150	Mw/Mn : 1.09	1g
P4203A-dPS	Mn x 10 <sup>3</sup> : 165	Mw/Mn : 1.2	1g
P9460-dPS	Mn x 10 <sup>3</sup> : 167	Mw/Mn : 1.07	1g
P10190-dPS	Mn x 10 <sup>3</sup> : 180	Mw/Mn : 1.09	1g
P4347A-dPS	Mn x 10 <sup>3</sup> : 190	Mw/Mn : 1.15	1g
P11355-dPS	Mn x 10 <sup>3</sup> : 195	Mw/Mn : 1.17	1g
P4201-dPS	Mn x 10 <sup>3</sup> : 218	Mw/Mn : 1.17	1g
P9380-dPS	Mn x 10 <sup>3</sup> : 220	Mw/Mn : 1.15	1g
P19879-dPS	Mn x 10 <sup>3</sup> : 220.5	Mw/Mn : 1.38	1g
P19878-dPS	Mn x 10 <sup>3</sup> : 228	Mw/Mn : 1.27	1g
P19911B-dPS	Mn x 10 <sup>3</sup> : 240	Mw/Mn : 1.9	1g
P19152-dPS	Mn x 10 <sup>3</sup> : 267	Mw/Mn : 1.55	1g
P19833-dPS	Mn x 10 <sup>3</sup> : 282	Mw/Mn : 1.08	1g
P19912B-dPS	Mn x 10 <sup>3</sup> : 365.5	Mw/Mn : 1.16	1g
P11350-dPS	Mn x 10 <sup>3</sup> : 390	Mw/Mn : 1.09	1g
P19894-dPS	Mn x 10 <sup>3</sup> : 400.5	Mw/Mn : 1.26	1g
P19874-dPS	Mn x 10 <sup>3</sup> : 441	Mw/Mn : 1.6	1g
P19892-dPS	Mn x 10 <sup>3</sup> : 458	Mw/Mn : 1.45	1g
P19911G-dPS	Mn x 10 <sup>3</sup> : 487	Mw/Mn : 1.17	1g
P19884-dPS	Mn x 10 <sup>3</sup> : 508	Mw/Mn : 1.55	1g
P19911A-dPS	Mn x 10 <sup>3</sup> : 525	Mw/Mn : 1.4	1g
P11354-dPS	Mn x 10 <sup>3</sup> : 540	Mw/Mn : 1.4	1g
P19911H1-dPS	Mn x 10 <sup>3</sup> : 541	Mw/Mn : 1.3	1g
P3588F1-dPS	Mn x 10 <sup>3</sup> : 550	Mw/Mn : 1.5	1g
P19886-dPS	Mn x 10 <sup>3</sup> : 555	Mw/Mn : 1.6	1g
P19893-dPS	Mn x 10 <sup>3</sup> : 556	Mw/Mn : 1.19	1g
P8803-dPS	Mn x 10 <sup>3</sup> : 575	Mw/Mn : 1.09	1g
P2412-dPS	Mn x 10 <sup>3</sup> : 587	Mw/Mn : 1.15	1g
P8520-dPS	Mn x 10 <sup>3</sup> : 600	Mw/Mn : 1.2	1g
P19912D-dPS	Mn x 10 <sup>3</sup> : 645.5	Mw/Mn : 1.3	1g
P19891-dPS	Mn x 10 <sup>3</sup> : 651	Mw/Mn : 1.29	1g
P19912A-dPS	Mn x 10 <sup>3</sup> : 693	Mw/Mn : 1.22	1g
P19911-dPS	Mn x 10 <sup>3</sup> : 767	Mw/Mn : 1.4	1g
P19911H-dPS	Mn x 10 <sup>3</sup> : 783	Mw/Mn : 1.2	1g
P3089-dPS	Mn x 10 <sup>3</sup> : 1,010	Mw/Mn : 1.35	1g
P19911F-dPS	Mn x 10 <sup>3</sup> : 1,306	Mw/Mn : 1.21	1g
P19910-dPS	Mn x 10 <sup>3</sup> : 1,387	Mw/Mn : 1.22	1g
P19912C-dPS	Mn x 10 <sup>3</sup> : 1,393	Mw/Mn : 1.2	1g
P19911C-dPS	Mn x 10 <sup>3</sup> : 1,459	Mw/Mn : 1.24	1g
P3586F1-dPS	Mn x 10 <sup>3</sup> : 1,500	Mw/Mn : 1.3	1g

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前ページからの続き

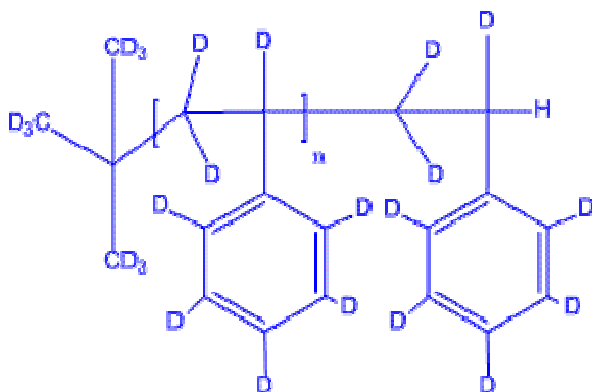
P3586F3-dPS	$M_n \times 10^3$ : 1,600	Mw/Mn : 1.4	1g
P19911D-dPS	$M_n \times 10^3$ : 1,735	Mw/Mn : 1.17	1g
P3595F4-dPS	$M_n \times 10^3$ : 2,000	Mw/Mn : 1.5	1g
P3585F2-dPS	$M_n \times 10^3$ : 2,200	Mw/Mn : 1.2	1g
P3686B-dPS	$M_n \times 10^3$ : 2,300	Mw/Mn : 1.3	1g
P3585F3-dPS	$M_n \times 10^3$ : 2,600	Mw/Mn : 1.3	1g
P3686A-dPS	$M_n \times 10^3$ : 2,700	Mw/Mn : 1.25	1g
P3591F3-dPS	$M_n \times 10^3$ : 3,055	Mw/Mn : 1.2	1g

## Deuterated Polystyrene (d8) initiated by deuterated MeLi initiator



P18503-dPS	$M_n \times 10^3$ : 26.5	Mw/Mn : 1.38	0.5g
P18502-dPS	$M_n \times 10^3$ : 28.5	Mw/Mn : 1.35	0.5g
P18502F3-dPS	$M_n \times 10^3$ : 30	Mw/Mn : 1.45	0.5g
P18502F2-dPS	$M_n \times 10^3$ : 64.5	Mw/Mn : 1.25	0.5g

## Deuterated Polystyrene (d8) Initiator by deuterated iso-PrLi or t-BuLi initiator

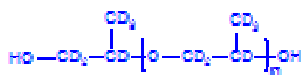


Comments: Comment section: alkyl-Li initiator

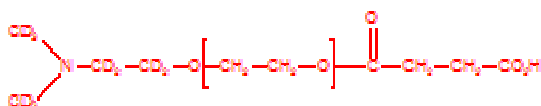
P18523-dPS	$M_n \times 10^3$ : 3.3	Mw/Mn : 1.16	d9 tert-Butyl	1g
P18791-dPS	$M_n \times 10^3$ : 6	Mw/Mn : 1.08	d9 tert-butyl	1g
P18520-dPS	$M_n \times 10^3$ : 11	Mw/Mn : 1.12	d7 iso-Propyl	1g
P18521-dPS	$M_n \times 10^3$ : 11	Mw/Mn : 1.1	d9 tert-Butyl	1g
P18540-dPS	$M_n \times 10^3$ : 21	Mw/Mn : 1.6	d7 iso-Propyl	1g

**Deuterated Thiol terminated polyethylene glycol methyl ether**

P5381A-dPEOCH3SH	$M_n \times 10^3 : 2$	Mw/Mn : 1.1	0.5g
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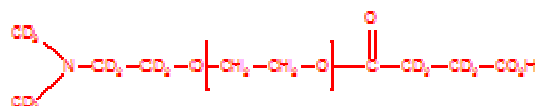
**Deuterated  $\alpha, \omega$ -Dihydroxy Terminated Poly (propylene glycol)**

P2122-dPPO	$M_n \times 10^3 : 6.2$	Mw/Mn : 1.05	1g
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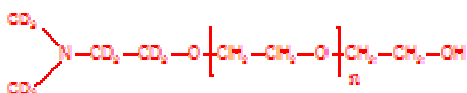
**(Deuterated  $\alpha$ -Dimethyl amino)- $\omega$ -Carboxy Terminated Protonated Poly(ethylene oxide)**

Comments: Protonated succinic acid

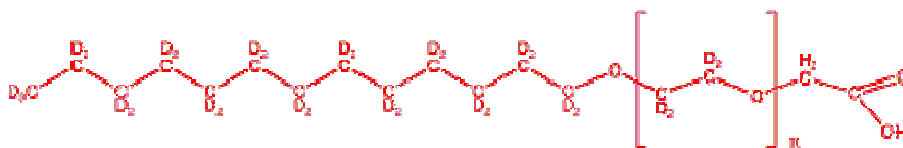
P2791-PEOCOOH	$M_n \times 10^3 : 50$	Mw/Mn : 1.06	1g
P2792-PEOCOOH	$M_n \times 10^3 : 65$	Mw/Mn : 1.06	1g

**(Deuterated  $\alpha$ -Dimethyl amino)- $\omega$ -Carboxy Terminated Protonated Poly(ethylene oxide), Deuterated Succinic Acid**

P2799	$M_n \times 10^3 : 56$	Mw/Mn : 1.02	1g
P2803	$M_n \times 10^3 : 62.5$	Mw/Mn : 1.07	1g

**(Deuterated  $\alpha$ -Dimethyl amino)- $\omega$ -Hydroxy Terminated Protonated Poly(ethylene glycol)**

P2787-PEG	$M_n \times 10^3 : 23$	Mw/Mn : 1.04	1g
P2772-PEG	$M_n \times 10^3 : 25$	Mw/Mn : 1.05	1g
P2789-PEG	$M_n \times 10^3 : 40$	Mw/Mn : 1.06	1g

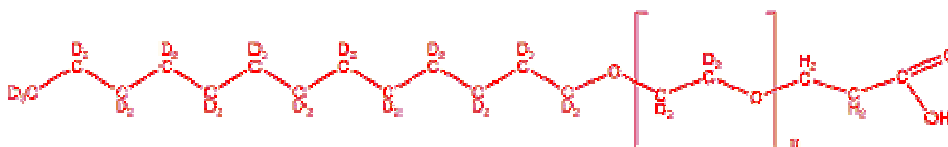
Deuterated  $\alpha$ -tridecanol,  $\omega$ -acetic acid Terminated deuterated poly(ethylene glycol)

P10042A-dPEO-Tridecanol-COOH

 $M_n \times 10^3 : 1.5$ 

Mw/Mn : 1.09

0.5g

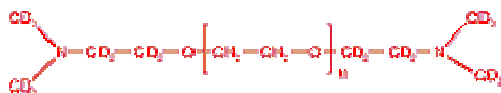
Deuterated  $\alpha$ -tridecanol,  $\omega$ -propionic acid Terminated deuterated poly(ethylene glycol)

P10042-dPEO-Tridecanol-COOH

 $M_n \times 10^3 : 1.5$ 

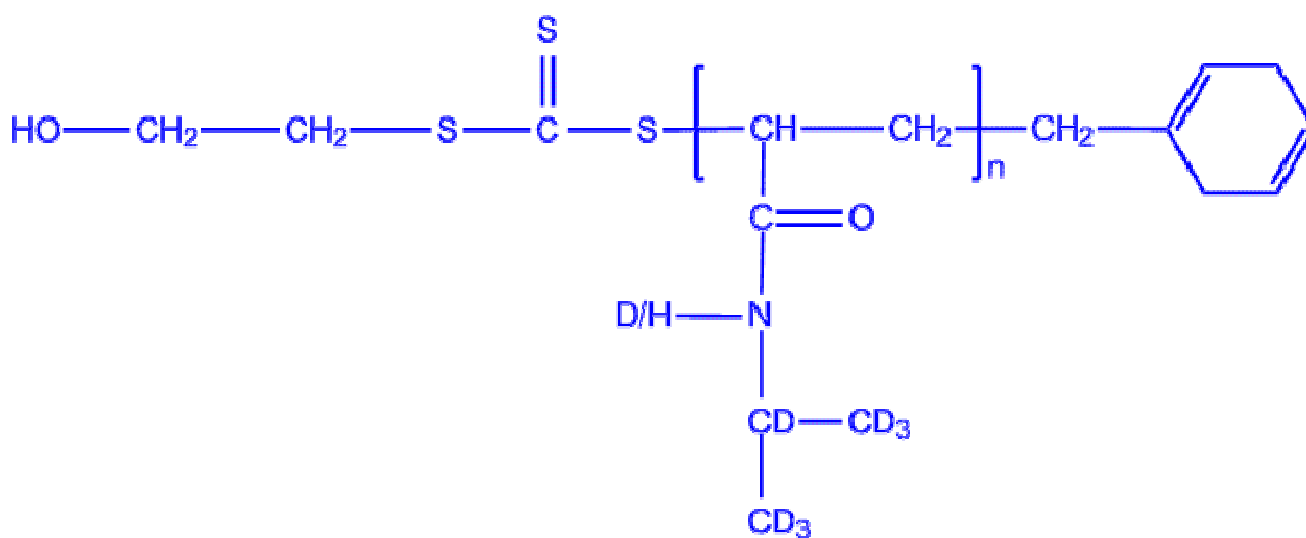
Mw/Mn : 1.09

0.5g

Deuterated  $\alpha$ - $\omega$ -Dimethyl amino Terminated Poly (ethylene glycol)

詳細についてはお問合せ下さい。

## Hydroxy Terminated Deuterated Poly(N-isopropyl acrylamide)



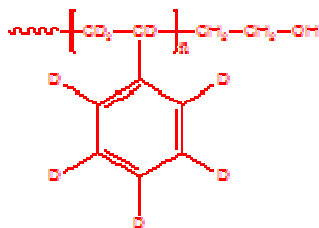
P14499-d7P19.5

 $M_n \times 10^3 : 1.5$ 

Mw/Mn : 1.15

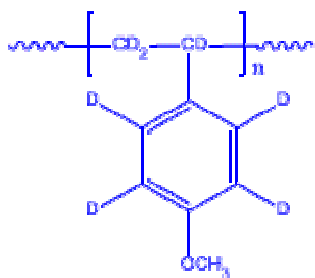
1g

## Hydroxy Terminated Deuterated Polystyrene



P10718-dPSOH	$M_n \times 10^3$ : 4.7	Mw/Mn : 1.05	1g
P18187-dPSOH	$M_n \times 10^3$ : 6.8	Mw/Mn : 1.04	1g
P8053-dPSOH	$M_n \times 10^3$ : 14	Mw/Mn : 1.05	1g
P1563-dPSOH	$M_n \times 10^3$ : 31.3	Mw/Mn : 1.04	1g
P2781-dPSOH	$M_n \times 10^3$ : 73	Mw/Mn : 1.05	1g
P2765-dPSOH	$M_n \times 10^3$ : 98.3	Mw/Mn : 1.03	1g
P2768-dPSOH	$M_n \times 10^3$ : 189	Mw/Mn : 1.06	1g

## Partially Deuterated Poly(4-methoxy styrene)



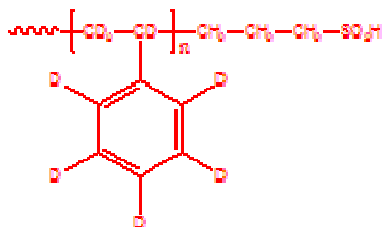
Comments: Methoxy is protonated and 30% of CD<sub>2</sub> on the backbone is substituted by proton.

P6363-dMeOS	$M_n \times 10^3$ : 81.8	Mw/Mn : 1.27	0.5g
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## Partially Deuterated Polyethylene (d2)

P40293-d2H2PE	$M_n \times 10^3$ : 73	Mw/Mn : 1.03	1g
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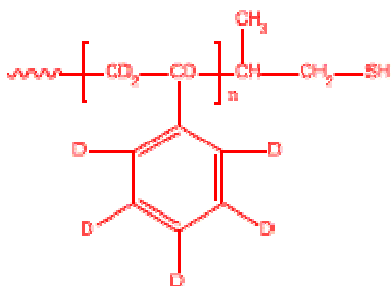
## Sulfonic Acid Terminated Deuterated Polystyrene



Comments:  $M_n \times 10^3$  ("f")

P1788-dPSSO3HT	$M_n \times 10^3$ : 315.4(>94.0)	Mw/Mn : 1.09	1g
P1777-dPSSO3HT	$M_n \times 10^3$ : 346.3(>90.0)	Mw/Mn : 1.08	1g

## Thiol Terminated Deuterated Polystyrene

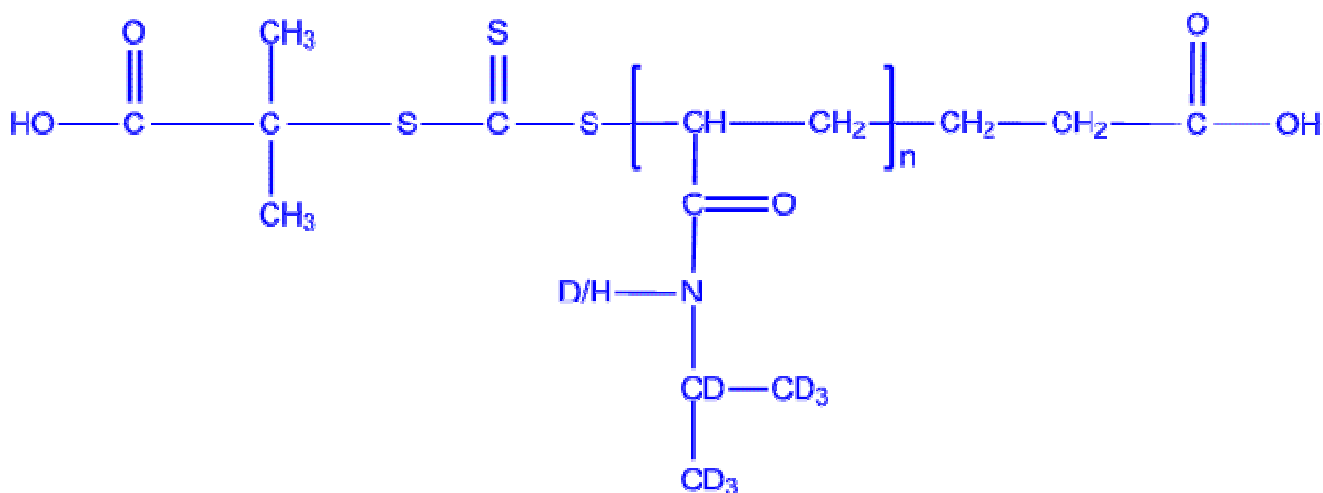


P8787-dPSSH

 $M_n \times 10^3 : 4.5$ 

Mw/Mn : 1.16

1g

 $\alpha, \omega$ -Dicarboxylic Acid Terminated Deuterated Poly(N-isopropyl acrylamide)

P11128A-d7NIPAM2COOH

 $M_n \times 10^3 : 8$ 

Mw/Mn : 1.18

1g

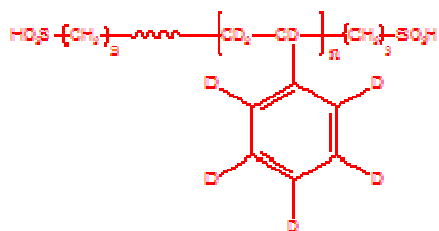
 $\alpha, \omega$ -Disulfonic Acid Terminated Deuterated Poly(ethylene oxide)Comments:  $M_n \times 10^3$  ("f")

P2822-dPEO2SO3H

 $M_n \times 10^3 : 68.5(>90\%)$ 

Mw/Mn : 1.04

1g

**$\alpha,\omega$ -Disulfonic Acid Terminated Deuterated Polystyrene**Comments:  $M_n \times 10^3$  ("F")

P1615-dPS2SO3HT	$M_n \times 10^3$ : 339(>1.9)	Mw/Mn : 1.11	1g
P1611-dPS2SO3HT	$M_n \times 10^3$ : 402(>1.9)	Mw/Mn : 1.13	1g