

# 產品目錄

## Catalog



# 研 緯

YANJIN Technology

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*Our Products Our Lives*

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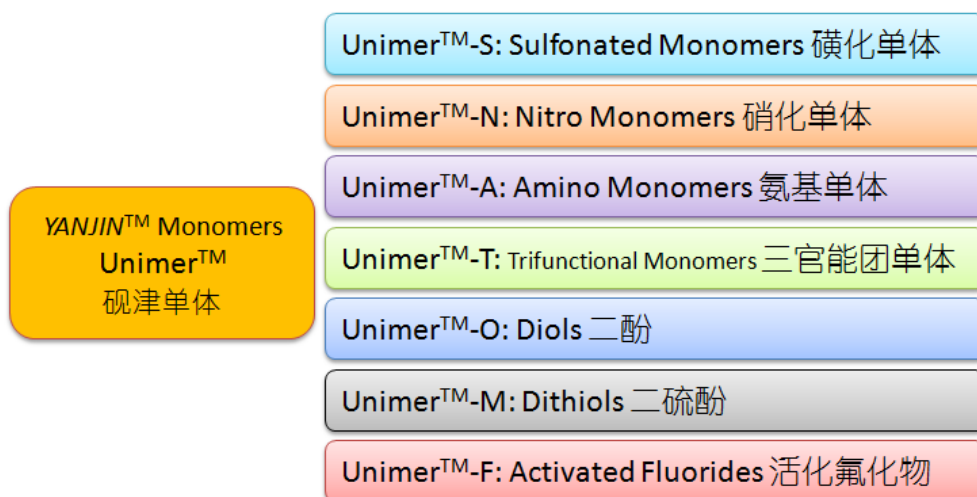
Email: sales@mono-poly.cn

Website: www.mono-poly.cn

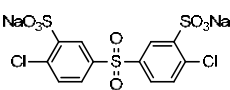
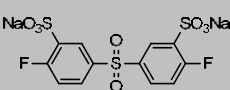
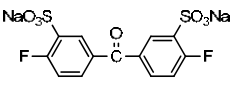
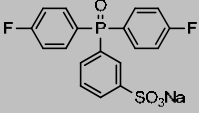
## YANJIN™ Monomers

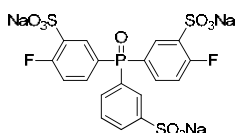
YANJIN™ Technology provides high quality key monomers (**Unimer™** series), for the synthesis of frontier polymeric materials across a broad range of application fields including high performance plastics, proton exchange membrane (PEM) or anion exchange membrane (AEM) fuel cells (FC), micro/ultrafiltration (MF/UF) water treatment, nanofiltration (NF) separation, reverse osmosis (RO) desalination, hem dialysis (HD), and permanent anti-electrostatics additives (PAEA).

YANJIN™ water soluble monomers (**Unimer™-S**) possess the highest quality in the market, which could be polymerized directly without any further purification. The hydrophilicity, crucial to ion conductance (PEM or AEMFC), water permeability (MF, UF, NF, RO, and HD), biocompatibility (HD), and charge transmittance (PAEA), is facile to be accurately and quantitatively introduced to the desired material skeleton, without impacting the original performance of the material.



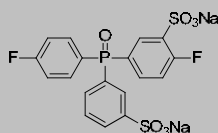
### Unimer™-S: Sulfonated Monomers 磺化单体

Catalog No.	Structures	Product Information
UMS0001		Bis(4-chloro-3-sulfophenyl)sulfone disodium salt, 99+%, White powder, Monomer grade, CAS No. 51698-33-0, C <sub>12</sub> H <sub>6</sub> Cl <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> S <sub>3</sub> , FW491.25, mp>280°C, 50g, 100g, 500g, 1Kg in plastic bottles \$149/50g, \$209/100g, \$729/500g, \$1019/1Kg, large scale upon inquiry
UMS0002		Bis(4-fluoro-3-sulfophenyl)sulfone disodium salt, 99+%, White powder, Monomer grade, CAS No. 301155-59-9, C <sub>12</sub> H <sub>6</sub> F <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> S <sub>3</sub> , FW458.34, mp>280°C, 5g, 25g, 50g, 100g in plastic bottles \$149/5g, \$519/25g, \$719/50g, \$999/100g, large scale upon inquiry
UMS0003		Disodium 3,3'-disulfonate-4,4'-difluorobenzophenone, 99+%, White powder, Monomer grade, CAS No. 210531-45-6, C <sub>13</sub> H <sub>6</sub> F <sub>2</sub> Na <sub>2</sub> O <sub>7</sub> S <sub>2</sub> , FW422.29, mp>280°C, 50g, 100g, 500g, 1Kg in plastic bottles \$159/50g, \$219/100g, \$759/500g, \$1059/1Kg
UMS0004		Bis(4-fluorophenyl)-(3-sulfophenyl)phosphine oxide sodium salt, 99+%, White powder, Monomer grade, CAS No. 302554-19-4, C <sub>18</sub> H <sub>12</sub> F <sub>2</sub> NaO <sub>4</sub> PS, FW416.31, mp>280°C, 5g, 25g, 50g, 100g in plastic bottles \$209/5g, \$729/25g, \$1019/50g, \$1419/100g

**UMS0005**


Bis(4-fluoro-3-sulfophenyl)-(3-sulfophenyl)phosphine oxide trisodium salt, 99+%, White powder, Monomer grade, CAS No. 1025482-62-5,  $C_{18}H_{10}F_2Na_3O_{10}PS_3$ , FW620.40, mp>280°C, 5g, 25g in plastic bottles

\$319/5g, \$1109/25g

**UMS0006**


(4-fluoro-3-sulfophenyl)-(3-sulfophenyl)-(4-fluorophenyl)phosphine oxide disodium salt, 99+%, White powder, Monomer grade, CAS No. 1025482-60-3,  $C_{18}H_{11}F_2Na_2O_7PS_2$ , FW518.36, mp>280°C, 5g, 25g in plastic bottles

\$519/5g, \$1699/25g

### Unimer™-N: Nitro Monomers 硝化单体

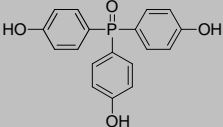
Catalog No.	Structures	Product Information
<b>UMN0001</b>		3,3'-Dinitro-4,4-dichlorodiphenylsulfone, CAS No: 1759-05-3, 99+%, Yellow powder, Monomer grade, $C_{12}H_6Cl_2N_2O_6S$ , FW377.16, mp201-202°C(lit.), 25g in plastic bottles \$249/25g
<b>UMN0002</b>		3,3'-Dinitro-4,4-difluorodiphenylsulfone, CAS No: 312-30-1, 99+%, Yellow powder, Monomer grade, $C_{12}H_6F_2N_2O_6S$ , FW344.25, mp193-194°C(lit.), 25g in plastic bottles \$389/25g
<b>UMN0003</b>		3,3'-Dinitro-4,4'-difluorobenzophenone, CAS No: 73329-64-3, 99+%, Yellow powder, Monomer grade, $C_{13}H_6F_2N_2O_5$ , FW308.19, mp139.4-141.0°C, 25g in plastic bottles \$319/25g
<b>UMN0004</b>		Bis(4-fluorophenyl)-(3-nitrophenyl)phosphine oxide, CAS No: 144091-75-8, 99+%, Yellow powder, Monomer grade, $C_{18}H_{12}F_2NO_3P$ , FW359.26, mp151-153°C, 25g in plastic bottles \$459/25g

### Unimer™-A: Amino Monomers 氨基单体

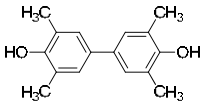
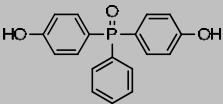
Catalog No.	Structures	Product Information
<b>UMA0001</b>		3,3'-Diamino-4,4'-difluorobenzophenone, CAS No: 148209-29-4, 99+%, Yellow powder, Monomer grade, $C_{13}H_{10}F_2N_2O$ , FW248.23, mp138-140°C, 25g in plastic bottles \$359/25g
<b>UMA0002</b>		3,3'-Diamino-4,4'-difluorodiphenylsulfone, CAS No: 40939-65-9, 99+%, Yellow needles, Monomer grade, $C_{12}H_{10}F_2N_2O_2S$ , FW 284.28, mp158-159°C(lit.), 25g in plastic bottles \$429/25g
<b>UMA0003</b>		3,3'-Diamino-4,4'-dichlorodiphenylsulfone, CAS No: 40179-07-5, 99+%, Yellow needles, Monomer grade, $C_{12}H_{10}Cl_2N_2O_2S$ , FW 317.19, mp158-160°C(lit.), 25g in plastic bottles \$289/25g
<b>UMA0004</b>		Bis(4-fluorophenyl)-(3-aminophenyl)phosphine oxide, CAS No: 144091-76-9, 99+%, Yellow powder, Monomer grade, $C_{18}H_{14}F_2NOP$ , FW329.28, mp143.5-146.3°C, 25g in plastic bottles \$499/25g

### Unimer™-T: Trifunctional Monomers 三官能团单体

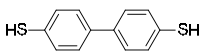
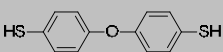
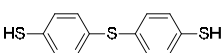
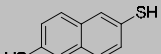
Catalog No.	Structures	Product Information
<b>UMT0001</b>		Tris(4-fluorophenyl)phosphine oxide, CAS No: 18437-79-1, 99+%, White powder, Monomer grade, $C_{18}H_{12}F_3OP$ , FW332.26, mp122-123°C(lit.), 25g in plastic bottle \$449/25g

<b>UMT0002</b>		<p>Tris(4-hydroxyphenyl)phosphine oxide, CAS No: 797-71-7, 99+%, White powder, Monomer grade, C<sub>18</sub>H<sub>15</sub>O<sub>4</sub>P, FW 326.28, mp273-275°C(lit.), 25g in plastic bottle</p> <p>\$549/25g</p>
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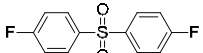
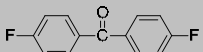

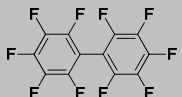
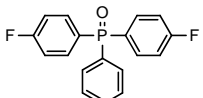
Unimer™-O: Diols 二酚

Catalog No.	Structures	Product Information
<b>DO0001</b>		<p>3,3',5,5'-Tetramethyl-1,1'-biphenyl-4,4'-diol, CAS No. 2417-04-1, 99+%, White powder, Monomer grade, C<sub>16</sub>H<sub>18</sub>O<sub>2</sub>, FW240.31, mp222-223°C(lit.), 50g, 100g in plastic bottles</p> <p>\$249/50g, \$389/100g</p>
<b>DO0002</b>		<p>Bis(4-hydroxyphenyl)phenylphosphine oxide, CAS No. 795-43-7, 99+%, White powder, Monomer grade, C<sub>18</sub>H<sub>15</sub>O<sub>3</sub>P, FW310.28, mp233-234°C(lit.), 25g in plastic bottles</p> <p>\$529/25g</p>

Unimer™-M: Dithiols 二硫酚

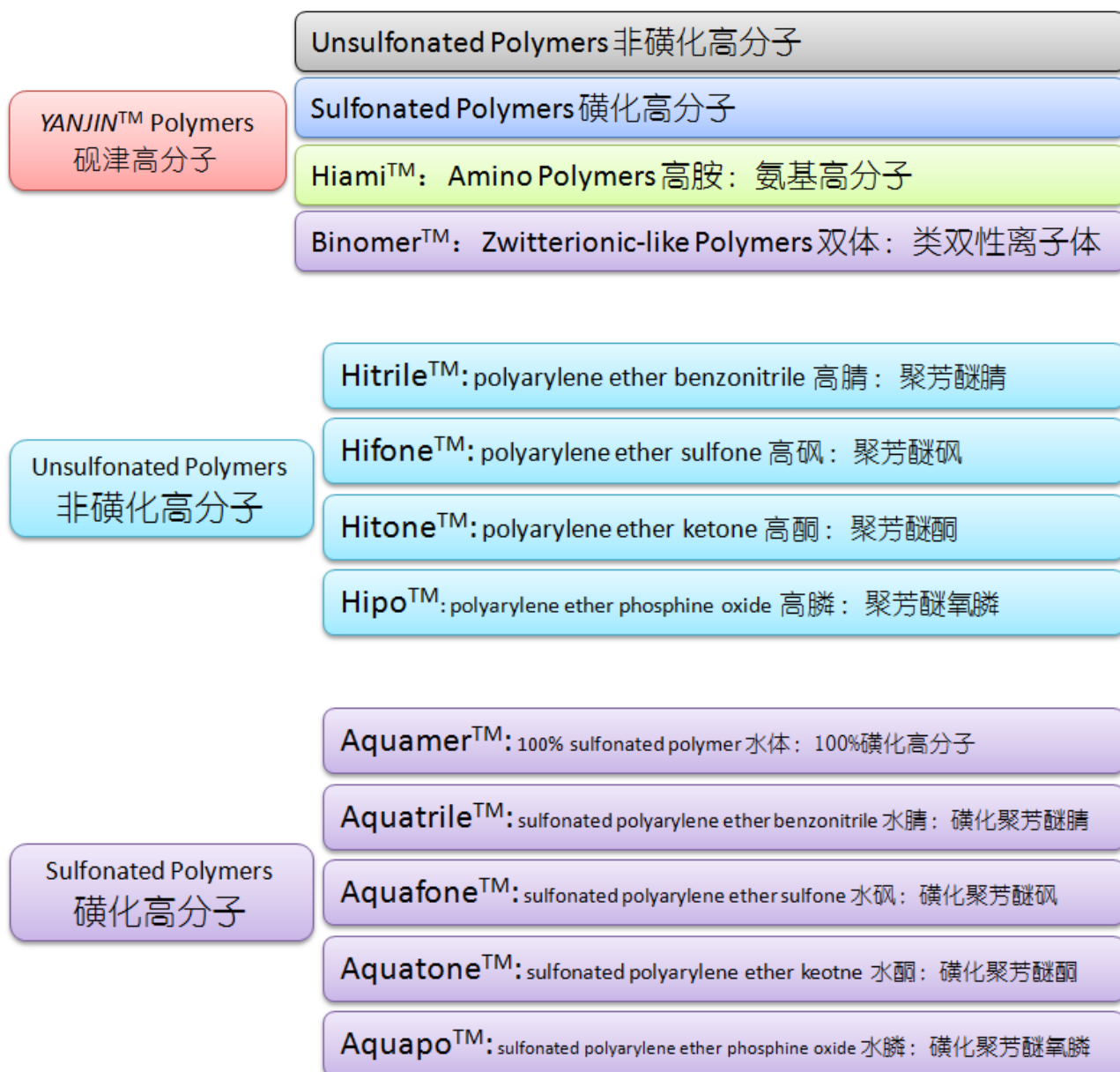
Catalog No.	Structures	Product Information
<b>DS0001</b>		<p>4,4'-Biphenyldithiol, CAS No. 6954-27-4, 99+%, yellow powder, Monomer grade, C<sub>6</sub>H<sub>10</sub>S<sub>2</sub>, FW218.34, mp183°C(lit.), 1g, 5g, 25g in plastic bottles</p> <p>\$119/1g, \$399/5g, \$1389/25g</p>
<b>DS0002</b>		<p>4,4'-Oxybis(benzenethiol), CAS No. 17527-79-6, 99+%, yellow powder, Monomer grade, C<sub>12</sub>H<sub>10</sub>OS<sub>2</sub>, FW234.34, mp103-104°C(lit.), 25g, 100g, 500g, 1Kg in plastic bottles</p> <p>\$129/25g, \$359/100g, \$1249/500g, \$2119/1Kg</p>
<b>DS0003</b>		<p>4,4'-Thiobis(benzenethiol), CAS No. 19362-77-7, 99+%, yellow powder, Monomer grade, C<sub>12</sub>H<sub>10</sub>S<sub>3</sub>, FW250.4, mp113°C(lit.), 500g, 1Kg in plastic bottles</p> <p>\$1299/500g, \$2119/1Kg</p>
<b>DS0004</b>		<p>2,6-Naphthalenedithiol, CAS No. 96892-95-4, 99+%, yellow powder, Monomer grade, C<sub>10</sub>H<sub>6</sub>S<sub>2</sub>, FW192.3, mp183-185°C(lit.), 5g, 10g, 25g in plastic bottles</p> <p>\$299/5g, \$469/10g, \$879/25g</p>

Unimer™-F: Activated Fluorides 活化氟化物

Catalog No.	Structures	Product Information
<b>AF0001</b>		<p>Bis(4-fluorophenyl) Sulfone, CAS No. 383-29-9, 99+%, white powder, Monomer grade, C<sub>12</sub>H<sub>8</sub>F<sub>2</sub>O<sub>2</sub>S, FW254.25, mp99°C(lit.), 50g, 100g, 500g, 1Kg in plastic bottles</p> <p>\$139/50g, \$219/100g, \$909/500g, \$1449/1Kg</p>
<b>AF0002</b>		<p>4,4'-Difluorobenzophenone, CAS No. 345-92-6, 99+%, white powder, Monomer grade, C<sub>13</sub>H<sub>8</sub>F<sub>2</sub>O, FW218.20, mp108°C(lit.), 250g, 500g, 1Kg in plastic bottle</p> <p>\$159/250g, \$249/500g, \$399/1Kg</p>
<b>AF0003</b>		<p>2,6-Difluorobenzonitrile, CAS No. 1897-52-5, 99+%, white powder, Monomer grade, C<sub>7</sub>H<sub>3</sub>F<sub>2</sub>N, FW139.10, mp29-30°C(lit.), 250g, 500g, 1Kg in plastic bottles</p> <p>\$199/250g, \$319/500g, \$509/1Kg</p>
<b>AF0004</b>		<p>Decafluorobiphenyl, CAS No. 434-90-2, 99+%, Beige powder, Monomer grade, C<sub>12</sub>F<sub>10</sub>, FW334.11, mp70°C(lit.), 25g, 100g, 250g, 500g, 1Kg in plastic bottles</p> <p>\$159/25g, \$629/100g, \$1499/250g, \$2639/500g, \$4199/1Kg</p>
<b>AF0005</b>		<p>Bis(4-fluorophenyl)phenylphosphine oxide, CAS No. 54300-32-2, 99+%, White powder, Monomer grade, C<sub>18</sub>H<sub>13</sub>F<sub>2</sub>OP, FW314.27, mp124°C(lit.), 25g in plastic bottles</p> <p>\$429/25g</p>

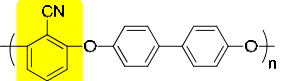
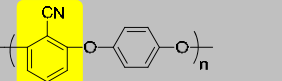
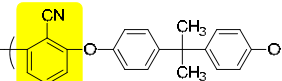
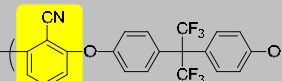
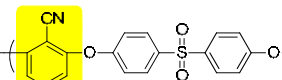
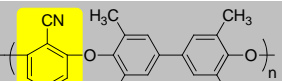
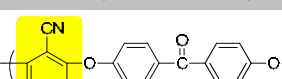
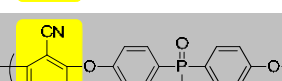
## YANJIN™ Polymers

**YANJIN™** high quality polymers cover an extensive spectrum of material categories. High molecular weight and narrow distribution together with accurate and systematic control of ion contents and location provide diverse choices for the material science research and commercialization.



## Unsulfonated Polymers 非磺化高分子

**Hitrile™: polyarylene ether benzonitrile 高腈：聚芳醚腈**

Structures	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	PEB001	>1.0	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry
	PEB002	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$109/5g, \$169/10g, \$299/25g Large scale upon inquiry
	PEB003	>0.8	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$119/5g, \$189/10g, \$329/25g Large scale upon inquiry
	PEB004	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$169/5g, \$269/10g, \$469/25g Large scale upon inquiry
	PEB005	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$129/5g, \$199/10g, \$349/25g Large scale upon inquiry
	PEB006	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$159/5g, \$249/10g, \$429/25g Large scale upon inquiry
	PEB007	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$139/5g, \$219/10g, \$379/25g Large scale upon inquiry
	PEB008	>0.5	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$189/5g, \$299/10g, \$519/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.



**Hifone™: polyarylene ether sulfone 高磺: 聚芳醚砜**

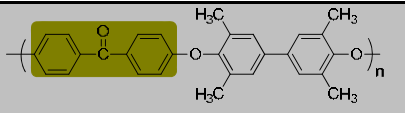
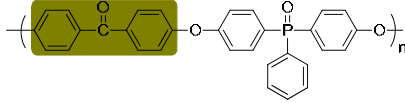
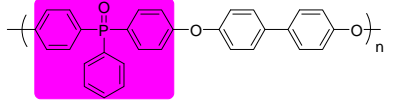
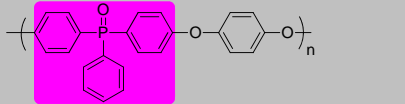
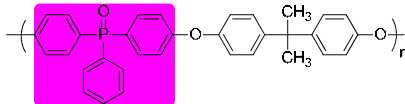
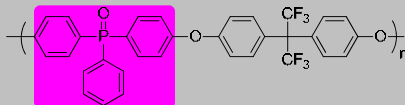
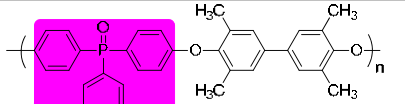
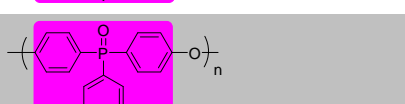
Structures	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	PES001	>1.0	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$129/5g, \$199/10g, \$349/25g Large scale upon inquiry
	PES002	>0.8	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$89/5g, \$139/10g, \$239/25g Large scale upon inquiry
	PES003	>0.8	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$99/5g, \$159/10g, \$279/25g Large scale upon inquiry
	PES004	>0.6	5g, 10g, 25g in plastic bottles	Biege fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry
	PES005	>0.7	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$109/5g, \$169/10g, \$299/25g Large scale upon inquiry
	PES006	>0.7	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$139/5g, \$219/10g, \$379/25g Large scale upon inquiry
	PES007	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$119/5g, \$189/10g, \$329/25g Large scale upon inquiry
	PES008	>0.5	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$169/5g, \$269/10g, \$469/25g Large scale upon inquiry

**Hitone™: polyarylene ether ketone 高酮: 聚芳醚酮**

	PEK001	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$129/5g, \$199/10g, \$349/25g Large scale upon inquiry
	PEK002	>0.5	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

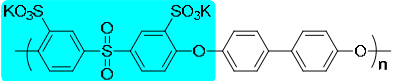
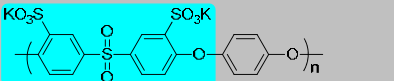
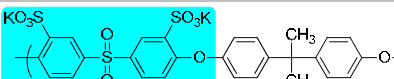
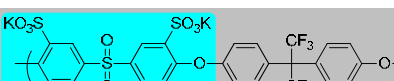
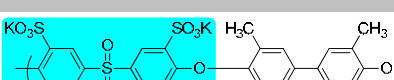
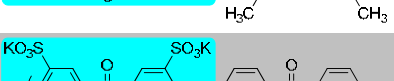
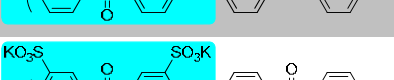
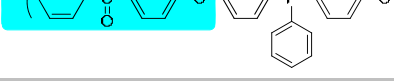


Structures	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	PEK003	>0.5	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$139/5g, \$219/10g, \$379/25g Large scale upon inquiry
	PEK004	>0.5	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$169/5g, \$269/10g, \$469/25g Large scale upon inquiry
<b>Hipo™: polyarylene ether phosphine oxide 高磷：聚芳醚氧磷</b>					
	PEP001	>0.8	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$199/5g, \$319/10g, \$559/25g Large scale upon inquiry
	PEP002	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$159/5g, \$249/10g, \$429/25g Large scale upon inquiry
	PEP003	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$169/5g, \$269/10g, \$469/25g Large scale upon inquiry
	PEP004	>0.5	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$219/5g, \$349/10g, \$609/25g Large scale upon inquiry
	PEP005	>0.6	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$209/5g, \$329/10g, \$569/25g Large scale upon inquiry
	PEP006	>0.4	5g, 10g, 25g in plastic bottles	White fibrous Solid	\$239/5g, \$379/10g, \$659/25g Large scale upon inquiry

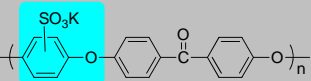
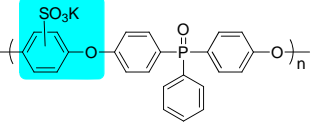
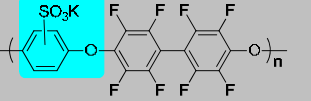
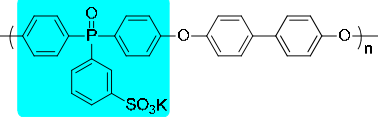
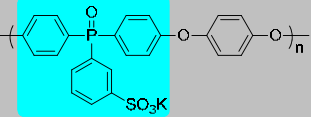
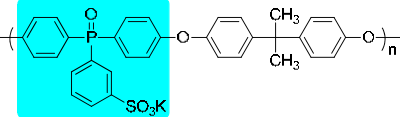
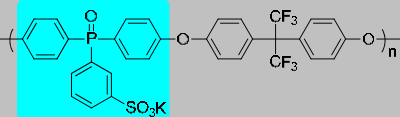
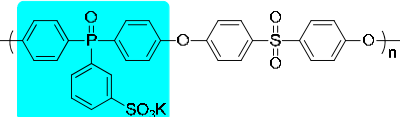
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

## Sulfonated Polymers 磺化高分子

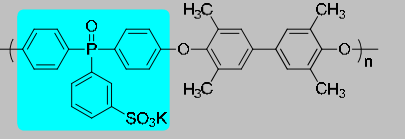
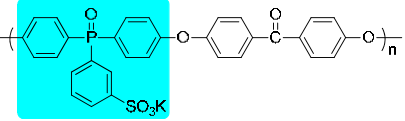
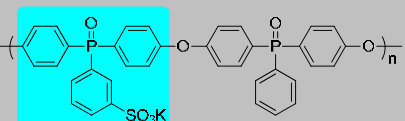
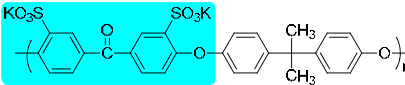
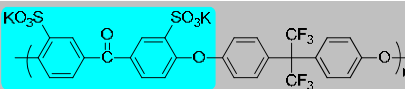
**Aquamer™**: 100% sulfonated polymers 水体: 100%磺化高分子

Structures	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	3.57	SEA001	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$245/5g, \$392/10g, \$686/25g Large scale upon inquiry
	4.13	SEA002	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$169/5g, \$270/10g, \$473/25g Large scale upon inquiry
	3.32	SEA003	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$188/5g, \$300/10g, \$526/25g Large scale upon inquiry
	2.81	SEA004	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$283/5g, \$452/10g, \$792/25g Large scale upon inquiry
	3.24	SEA006	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$264/5g, \$422/10g, \$739/25g Large scale upon inquiry
	3.40	SEA007	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$226/5g, \$361/10g, \$633/25g Large scale upon inquiry
	2.92	SEA008	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	3.46	SEA009	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$207/5g, \$331/10g, \$579/25g Large scale upon inquiry

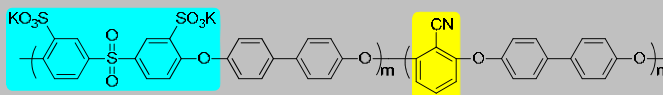
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

Structures	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	2.71	SEA010	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$195/5g, \$312/10g, \$546/25g Large scale upon inquiry
	2.15	SEA011	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$255/5g, \$408/10g, \$714/25g Large scale upon inquiry
	2.06	SEA012	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$265/5g, \$424/10g, \$742/25g Large scale upon inquiry
	1.85	SEA013	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$378/5g, \$604/10g, \$1058/25g Large scale upon inquiry
	2.15	SEA014	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$302/5g, \$483/10g, \$845/25g Large scale upon inquiry
	1.72	SEA015	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	1.45	SEA016	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$416/5g, \$665/10g, \$1165/25g Large scale upon inquiry
	1.65	SEA017	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

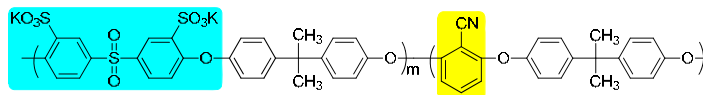
Structures	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	1.68	SEA018	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$397/5g, \$635/10g, \$1111/25g Large scale upon inquiry
	1.76	SEA019	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	1.50	SEA020	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$454/5g, \$726/10g, \$1271/25g Large scale upon inquiry
	3.53	SEA021	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$245/5g, \$392/10g, \$686/25g Large scale upon inquiry
	2.96	SEA022	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$283/5g, \$452/10g, \$792/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

**Aquatrile™: sulfonated polyarylene ether benzonitrile 水腈：磺化聚芳腈腈**


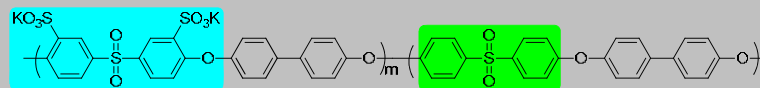
Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.64	SEB0101	>0.8	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$131/5g, \$210/10g, \$368/25g Large scale upon inquiry
20:80	1.18	SEB0102	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$133/5g, \$213/10g, \$372/25g Large scale upon inquiry
30:70	1.63	SEB0103	>0.7	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$136/5g, \$218/10g, \$381/25g Large scale upon inquiry
40:60	2.02	SEB0104	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$142/5g, \$227/10g, \$397/25g Large scale upon inquiry
50:50	2.36	SEB0105	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$144/5g, \$230/10g, \$403/25g Large scale upon inquiry
60:40	2.66	SEB0106	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry
70:30	2.93	SEB0107	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$193/5g, \$309/10g, \$541/25g Large scale upon inquiry
80:20	3.17	SEB0108	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$206/5g, \$330/10g, \$577/25g Large scale upon inquiry
90:10	3.38	SEB0109	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$219/5g, \$350/10g, \$614/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.



Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.56	SEB0201	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$101/5g, \$162/10g, \$283/25g Large scale upon inquiry
20:80	1.05	SEB0202	>0.6	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$103/5g, \$165/10g, \$288/25g Large scale upon inquiry
30:70	1.46	SEB0203	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$105/5g, \$168/10g, \$294/25g Large scale upon inquiry
40:60	1.83	SEB0204	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$107/5g, \$171/10g, \$299/25g Large scale upon inquiry
50:50	2.15	SEB0205	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$109/5g, \$174/10g, \$305/25g Large scale upon inquiry
60:40	2.44	SEB0206	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$119/5g, \$190/10g, \$333/25g Large scale upon inquiry
70:30	2.69	SEB0207	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$149/5g, \$238/10g, \$416/25g Large scale upon inquiry
80:20	2.92	SEB0208	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$158/5g, \$253/10g, \$444/25g Large scale upon inquiry
90:10	3.13	SEB0209	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$168/5g, \$269/10g, \$471/25g Large scale upon inquiry

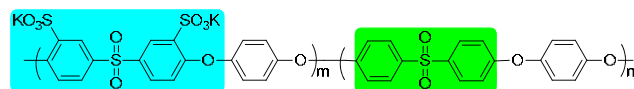
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

**Aquafone™: sulfonated polyarylene ether sulfone 水砒: 磺化聚芳砒砒**


Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.48	SES0101	>0.8	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$131/5g, \$210/10g, \$368/25g Large scale upon inquiry
20:80	0.92	SES0102	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$133/5g, \$213/10g, \$372/25g Large scale upon inquiry
30:70	1.34	SES0103	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$136/5g, \$218/10g, \$381/25g Large scale upon inquiry
40:60	1.72	SES0104	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$142/5g, \$227/10g, \$397/25g Large scale upon inquiry
50:50	2.08	SES0105	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$144/5g, \$230/10g, \$403/25g Large scale upon inquiry
60:40	2.42	SES0106	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry
70:30	2.73	SES0107	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$193/5g, \$309/10g, \$541/25g Large scale upon inquiry
80:20	3.03	SES0108	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$206/5g, \$330/10g, \$577/25g Large scale upon inquiry
90:10	3.31	SES0109	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$219/5g, \$350/10g, \$614/25g Large scale upon inquiry

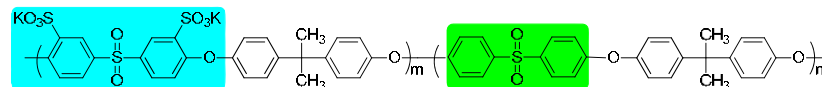
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.





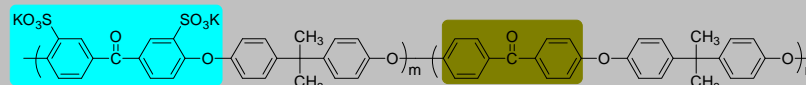
Ratios(m/n)	IEC (meq/g)	YANJIN <sup>TM</sup> Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.59	SES0201	>0.8	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$91/5g, \$145/10g, \$254/25g Large scale upon inquiry
20:80	1.12	SES0202	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$93/5g, \$148/10g, \$259/25g Large scale upon inquiry
30:70	1.61	SES0203	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$95/5g, \$151/10g, \$264/25g Large scale upon inquiry
40:60	2.06	SES0204	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$97/5g, \$154/10g, \$269/25g Large scale upon inquiry
50:50	2.47	SES0205	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$99/5g, \$157/10g, \$274/25g Large scale upon inquiry
60:40	2.85	SES0206	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$107/5g, \$171/10g, \$299/25g Large scale upon inquiry
70:30	3.21	SES0207	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$133/5g, \$214/10g, \$373/25g Large scale upon inquiry
80:20	3.54	SES0208	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$142/5g, \$228/10g, \$398/25g Large scale upon inquiry
90:10	3.84	SES0209	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$151/5g, \$242/10g, \$424/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.



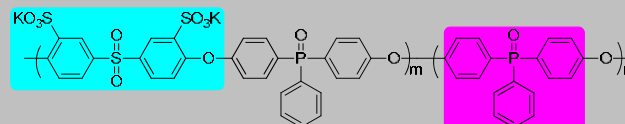
Ratios(m/n)	IEC (meq/g)	YANJIN <sup>TM</sup> Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.44	SES0301	>0.8	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$101/5g, \$162/10g, \$283/25g Large scale upon inquiry
20:80	0.84	SES0302	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$103/5g, \$165/10g, \$288/25g Large scale upon inquiry
30:70	1.22	SES0303	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$105/5g, \$168/10g, \$294/25g Large scale upon inquiry
40:60	1.58	SES0304	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$107/5g, \$171/10g, \$299/25g Large scale upon inquiry
50:50	1.91	SES0305	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$109/5g, \$174/10g, \$305/25g Large scale upon inquiry
60:40	2.23	SES0306	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$119/5g, \$190/10g, \$333/25g Large scale upon inquiry
70:30	2.52	SES0307	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$149/5g, \$238/10g, \$416/25g Large scale upon inquiry
80:20	2.80	SES0308	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$158/5g, \$253/10g, \$444/25g Large scale upon inquiry
90:10	3.07	SES0309	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$168/5g, \$269/10g, \$471/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

**Aquatone™: sulfonated polyarylene ether ketone 水酮：磺化聚芳醚酮**


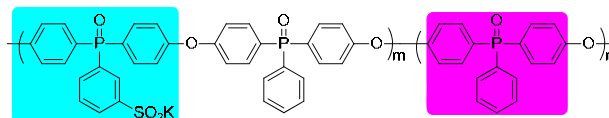
Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.47	SEK0101	>0.7	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$131/5g, \$210/10g, \$368/25g Large scale upon inquiry
20:80	0.91	SEK0102	>0.6	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$133/5g, \$213/10g, \$372/25g Large scale upon inquiry
30:70	1.32	SEK0103	>0.6	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$136/5g, \$218/10g, \$381/25g Large scale upon inquiry
40:60	1.70	SEK0104	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$142/5g, \$227/10g, \$397/25g Large scale upon inquiry
50:50	2.06	SEK0105	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$144/5g, \$230/10g, \$403/25g Large scale upon inquiry
60:40	2.39	SEK0106	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$149/5g, \$239/10g, \$419/25g Large scale upon inquiry
70:30	2.70	SEK0107	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$193/5g, \$309/10g, \$541/25g Large scale upon inquiry
80:20	2.99	SEK0108	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$206/5g, \$330/10g, \$577/25g Large scale upon inquiry
90:10	3.27	SEK0109	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$219/5g, \$350/10g, \$614/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

**Aquapo™: sulfonated polyarylene ether phosphine oxide 水磷: 磺化聚芳醚氧磷**


Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.60	SEP0101	>0.6	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$172/5g, \$276/10g, \$473/25g Large scale upon inquiry
20:80	1.08	SEP0102	>0.6	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$176/5g, \$281/10g, \$492/25g Large scale upon inquiry
30:70	1.46	SEP0103	>0.5	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$179/5g, \$287/10g, \$501/25g Large scale upon inquiry
40:60	1.78	SEP0104	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$183/5g, \$292/10g, \$511/25g Large scale upon inquiry
50:50	2.05	SEP0105	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$186/5g, \$297/10g, \$520/25g Large scale upon inquiry
60:40	2.27	SEP0106	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$203/5g, \$234/10g, \$568/25g Large scale upon inquiry
70:30	2.47	SEP0107	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$253/5g, \$405/10g, \$709/25g Large scale upon inquiry
80:20	2.64	SEP0108	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$270/5g, \$432/10g, \$757/25g Large scale upon inquiry
90:10	2.79	SEP0109	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$287/5g, \$459/10g, \$804/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.



Ratios(m/n)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:90	0.30	SEP0201	>0.5	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$243/5g, \$390/10g, \$682/25g Large scale upon inquiry
20:80	0.55	SEP0202	>0.5	5g, 10g, 25g in plastic bottles	Light yellow fibrous Solid	\$248/5g, \$397/10g, \$695/25g Large scale upon inquiry
30:70	0.74	SEP0203	>0.5	5g, 10g, 25g in plastic bottles	Yellow fibrous Solid	\$253/5g, \$405/10g, \$709/25g Large scale upon inquiry
40:60	0.91	SEP0204	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$258/5g, \$412/10g, \$722/25g Large scale upon inquiry
50:50	1.05	SEP0205	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$262/5g, \$420/10g, \$736/25g Large scale upon inquiry
60:40	1.16	SEP0206	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$286/5g, \$458/10g, \$803/25g Large scale upon inquiry
70:30	1.27	SEP0207	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$358/5g, \$573/10g, \$1003/25g Large scale upon inquiry
80:20	1.36	SEP0208	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$382/5g, \$611/10g, \$1070/25g Large scale upon inquiry
90:10	1.43	SEP0209	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous Solid	\$406/5g, \$650/10g, \$1137/25g Large scale upon inquiry

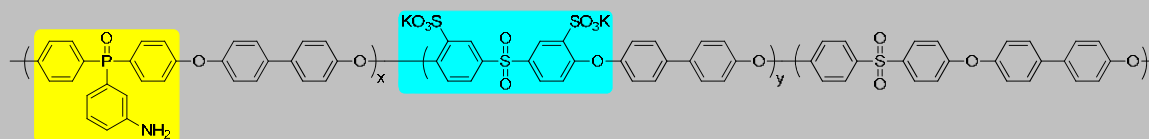
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

## Hiami™: Amino Polymers 高胺: 氨基高分子

Structures	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
	2.10	PaAE001	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$378/5g, \$604/10g, \$1058/25g Large scale upon inquiry
	2.50	PaAE002	>0.6	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$302/5g, \$483/10g, \$845/25g Large scale upon inquiry
	1.93	PaAE003	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	1.60	PaAE004	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$416/5g, \$665/10g, \$1165/25g Large scale upon inquiry
	1.85	PaAE005	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	1.88	PaAE006	>0.5	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$397/5g, \$635/10g, \$1111/25g Large scale upon inquiry
	1.98	PaAE007	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$321/5g, \$513/10g, \$899/25g Large scale upon inquiry
	1.67	PaAE008	>0.4	5g, 10g, 25g in plastic bottles	Brown fibrous solid	\$454/5g, \$726/10g, \$1271/25g Large scale upon inquiry

\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.

## Binomer™: Zwitterionic-like Polymers 双体：类两性离子体



Ratios(x:y:z)	IEC (meq/g)	YANJIN™ Catalog No.	Intrinsic Viscosity (dL/g)*	Packaging	Status	Prices
10:5:85	0.48	Pas0101	>0.7	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
20:10:70	0.93	Pas0102	>0.6	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
30:15:55	1.34	Pas0103	>0.5	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
40:20:40	1.73	Pas0104	>0.5	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
50:25:25	2.09	Pas0105	>0.5	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
60:30:10	2.43	Pas0106	>0.4	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry
66.67:33.33:0	2.64	Pas0107	>0.4	1g, 5g in plastic bottles	Brown fibrous Solid	\$499/1g, \$1739/5g Large scale upon inquiry

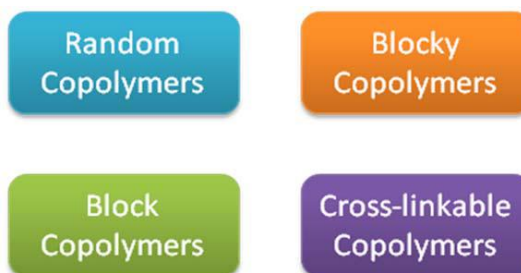
\*Intrinsic viscosity is measured using Ubbelohde viscometer in NMP containing 0.05M LiBr at 25°C. Intrinsic viscosity can be varied upon customer's request.



## Polymer Custom Synthesis 定制合成

**You Name It, We Will Make It!** YANJIN™ can provide custom chemical synthesis and conduct contract research with high quality and on-time delivery.

### Polymer Categories



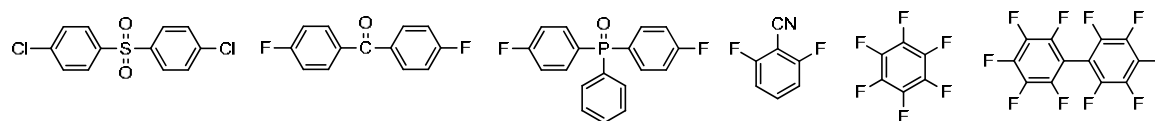
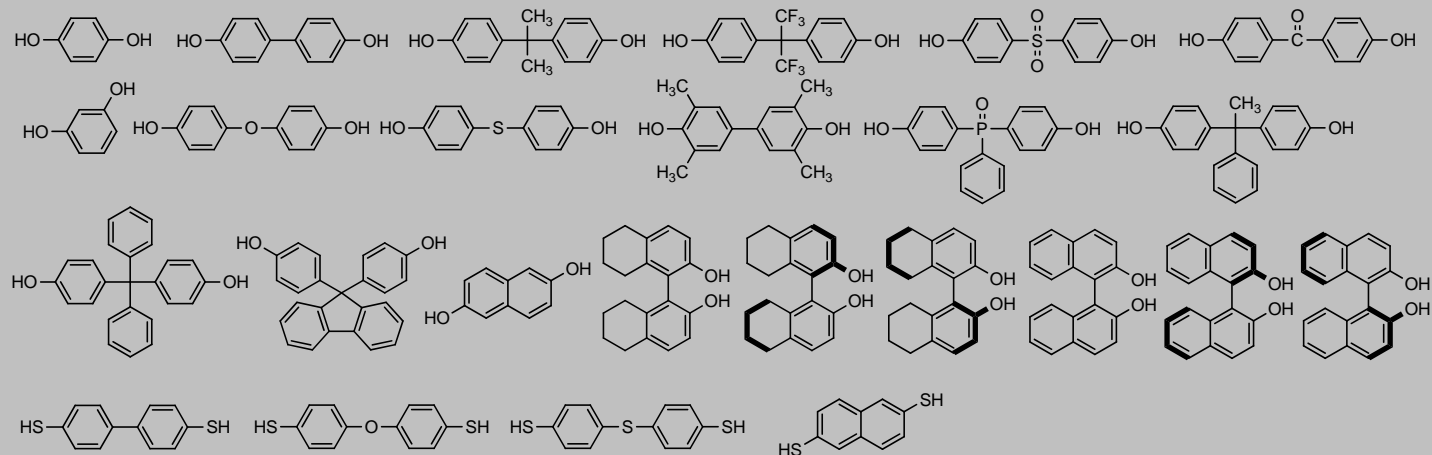
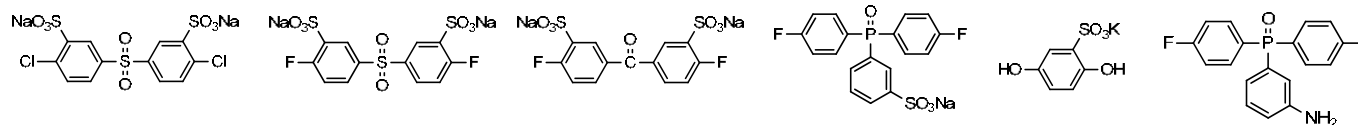
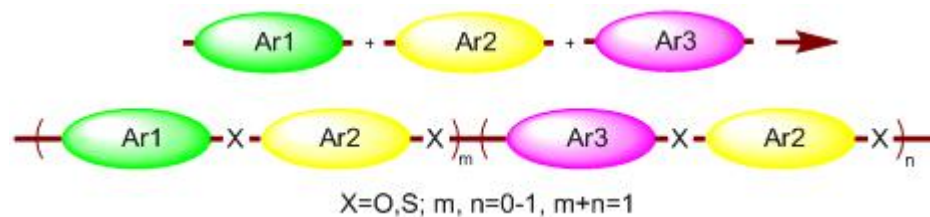
**Random copolymers** are prepared based on the combination of any YANJIN™ monomers and other monomers. The sulfonation degree ranges from 0 to 100 percent according to ratios between sulfonated and unsulfonated monomers. The molecular weight can also be varied.

**Blocky copolymers** are prepared using either a hydrophilic or hydrophobic block through the polymerization with the rest monomers based on the combination of any YANJIN™ monomers and other monomers. The block length ranges from 3,000 to 20,000 g/mol.

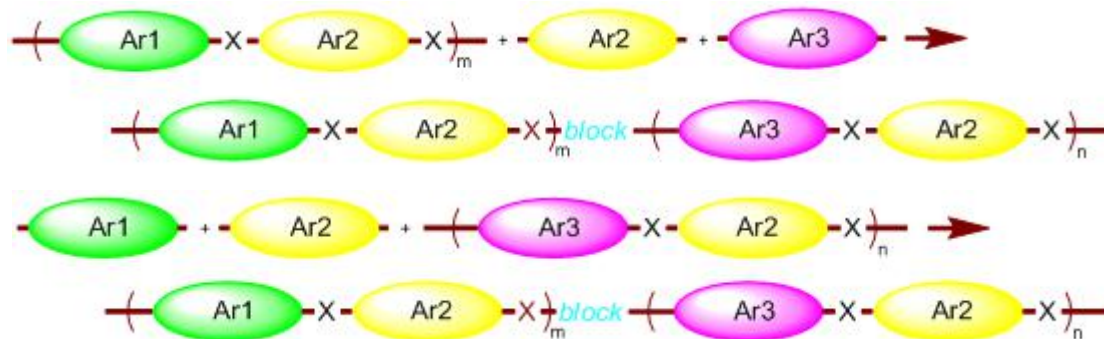
**Block copolymers** are prepared using two pre-made blocks. The block length ranges from 3,000 to 20,000 g/mol.

**Crosslinkable copolymers** contain moieties that could be crosslinked upon UV light or heat. The crosslinkable monomers include aromatic ketone or methyl groups.

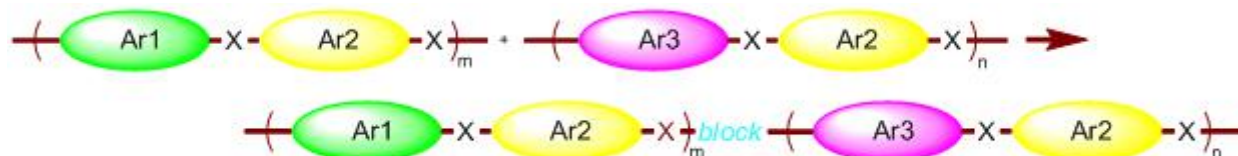
### Part I: Random Copolymers 无规聚合物



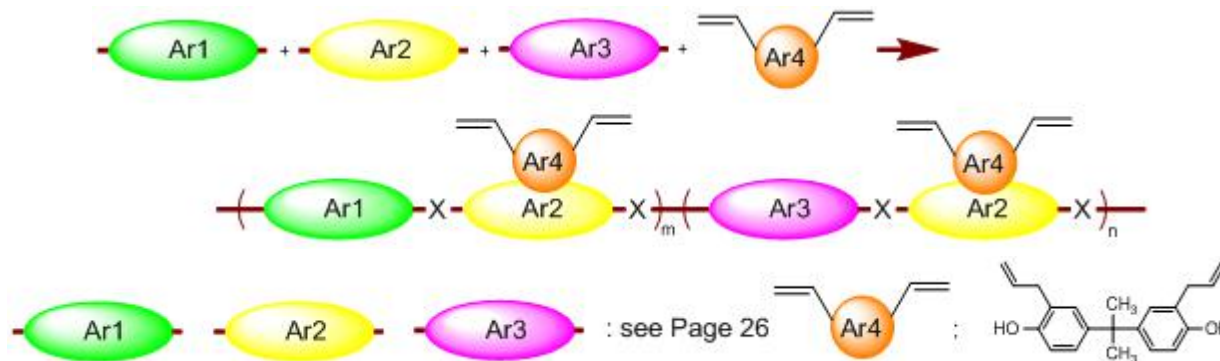
### Part II: Blocky Copolymers 类嵌段聚合物



### Part III: Block Copolymers 嵌段聚合物



### Part IV: Cross-linkable Copolymers 可交联聚合物



## Joint Development Program

**YANJIN™** Technology owns many efficient synthetic techniques suitable for the production of a series of high performance polymeric materials, especially for uncommon application purposes. We are fully open to collaborate with the scientists from all over the world to discover more together.

