



SEPLIFE



## Seplife<sup>®</sup> Solid Phase Peptide Synthesis (SPPS) Resins



SEPLIFE

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SR2605471



 **SUNRESIN**  
Driving the innovation  
STOCK CODE SZ 300487



## About Sunresin

- **Market Value: \$4 Billion**

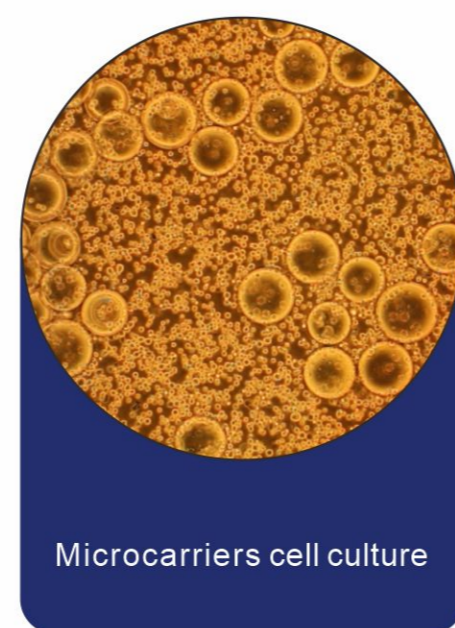
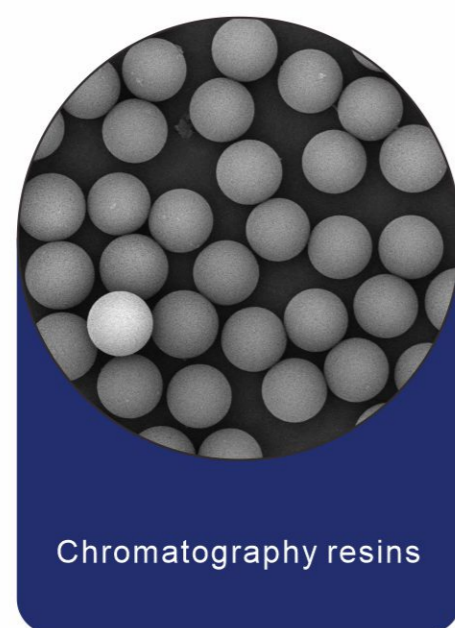
We're Asia's largest manufacturer of ion exchange and adsorbent resins and an A-listed company in China, employing over 1600 people worldwide.

- **Driven by Innovation**

With 30% of our workforce dedicated to R&D, we lead the way in developing cutting-edge solutions for the most complex challenges.

- **Top 3 in the world**

An internationally-recognized innovation leader in separation, purification and extraction technologies for highly-regulated global industries.



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## Polystyrene resins

Seplife<sup>®</sup> resins for Solid Phase Peptide Synthesis (SPPS) are made of polystyrene with 1% divinylbenzene (DVB), characterized by controlled particle size distribution, high swelling and excellent performances in peptide synthesis. Polystyrene is the most common core resin used in solid phase peptide chemistry, due to its chemical stability, compatibility with most organic solvents and of course cost and availability.

Seplife<sup>®</sup> SPPS resins are insoluble in all common solvents, they swell in most organic solvents and are chemically stable during the synthesis process.

References: [1, 2]



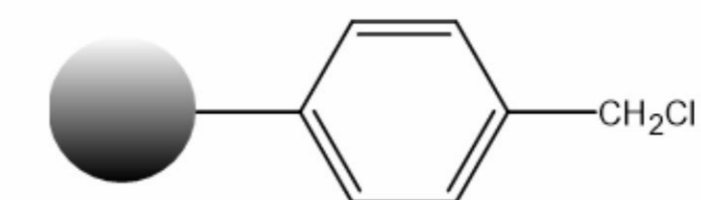
## BOC Chemistry-SPPS

Seplife<sup>®</sup> resins represent a significant advancement in the field of peptide synthesis, particularly within the context of Boc (tert-butyloxycarbonyl) chemistry when Boc protecting groups are utilized to safeguard the amino functionality during peptide bond formation.

These innovative resins are engineered to enhance the efficiency and effectiveness of peptide synthesis by providing superior stability and solubility characteristics. Seplife<sup>®</sup> resins enable streamlined workflow with improved coupling reactions and minimized side reactions. Their unique properties facilitate high loading capacity and better accessibility of reactive sites, leading to higher yields and purities of synthesized peptides. As a result, the incorporation of Seplife<sup>®</sup> resins in peptide synthesis is increasingly popular among researchers and manufacturers seeking reliable and reproducible results in the preparation of peptide-based therapeutics and bioconjugates.

## Seplife<sup>®</sup> Chloromethyl Resin

Seplife<sup>®</sup> Chloromethyl Resin known also as Merrifield resin is the standard support for the peptide synthesis by BOC strategy. The first amino acid is attached to Merrifield resins by nucleophilic displacement of chlorine. The resulting resin-substrate bond is stable in mild acids such as trifluoroacetic acid (TFA) and requires strong acid conditions for cleavage such as HF or TFMSA (trifluoromethanesulfonic acid).



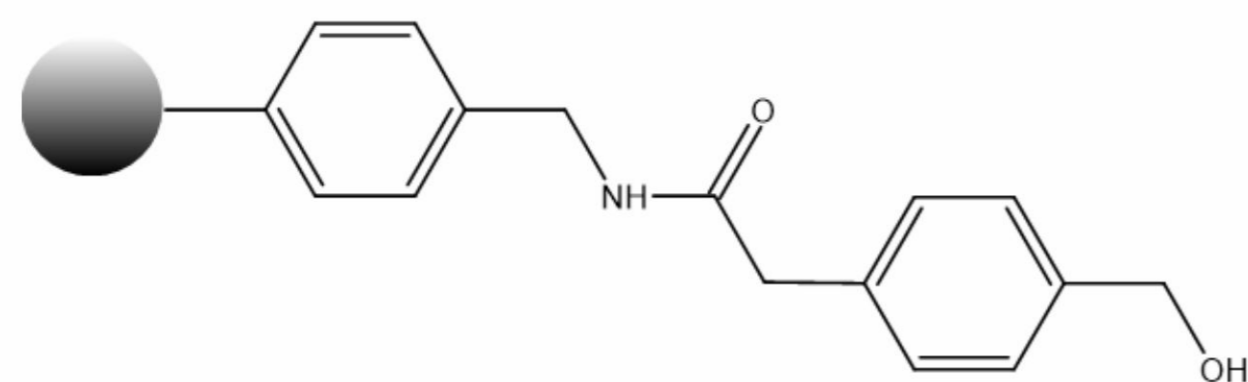
Product	Seplife <sup>®</sup> Chloromethyl Resin (Merrifield resin)
Appearance	Off white or light yellow beads
Type	Gel type resin functionalized with chloromethyl groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6; 1.6-2.0; 2.0-2.4; 2.4-2.8; 2.8-3.4; 3.4-4.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### Ordering information

Product Name	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife <sup>®</sup> Chloromethyl Resin (0.4-0.6)	LXSS02-1-1201	100-200	75-150	0.4-0.6
Seplife <sup>®</sup> Chloromethyl Resin (0.6-0.8)	LXSS02-1-1202	100-200	75-150	0.6-0.8
Seplife <sup>®</sup> Chloromethyl Resin (0.8-1.0)	LXSS02-1-1203	100-200	75-150	0.8-1.0
Seplife <sup>®</sup> Chloromethyl Resin (1.0-1.2)	LXSS02-1-1204	100-200	75-150	1.0-1.2
Seplife <sup>®</sup> Chloromethyl Resin (1.2-1.4)	LXSS02-1-1205	100-200	75-150	1.2-1.4
Seplife <sup>®</sup> Chloromethyl Resin (1.4-1.6)	LXSS02-1-1206	100-200	75-150	1.4-1.6
Seplife <sup>®</sup> Chloromethyl Resin (1.6-2.0)	LXSS02-1-1207	100-200	75-150	1.6-2.0
Seplife <sup>®</sup> Chloromethyl Resin (2.0-2.4)	LXSS02-1-1208	100-200	75-150	2.0-2.4
Seplife <sup>®</sup> Chloromethyl Resin (2.4-2.8)	LXSS02-1-1209	100-200	75-150	2.4-2.8
Seplife <sup>®</sup> Chloromethyl Resin (2.8-3.4)	LXSS02-1-1210	100-200	75-150	2.8-3.4
Seplife <sup>®</sup> Chloromethyl Resin (3.4-4.0)	LXSS02-1-1211	100-200	75-150	3.4-4.0

## Seplife® PAM Resin

Seplife® PAM resin (4-(hydroxymethyl) phenylacetamidomethyl polystyrene resin) is a widely used resin in the solid-phase synthesis of peptides protected by the Boc strategy. It exhibits stronger acid stability than Merrifield resin, making it suitable for synthesizing medium- and long-sequence peptides or fragment peptides, such as DNA-bound polyamines, human matrix  $\gamma$ -carboxylglutamate protein (MGP), and K-casein. The first carboxylic acid can be coupled to the PAM resin using activators such as DCC (dicyclohexylcarbodiimide) and DMAP (4-dimethylaminopyridine). These conditions can lead to partial epimerization of the amino acid, so HOBT is normally added to reduce racemization. The completed peptide can be deprotected and cleaved from the resin simultaneously with HF which requires special HF-resistant equipment and suitable health and safety precautions. Alternative cleavage protocols are the use of TFMSA (trifluoromethanesulfonic acid) or TMSOTf (trimethylsilyl trifluoromethanesulfonate), by using multiple steps to remove all side chain protecting groups.



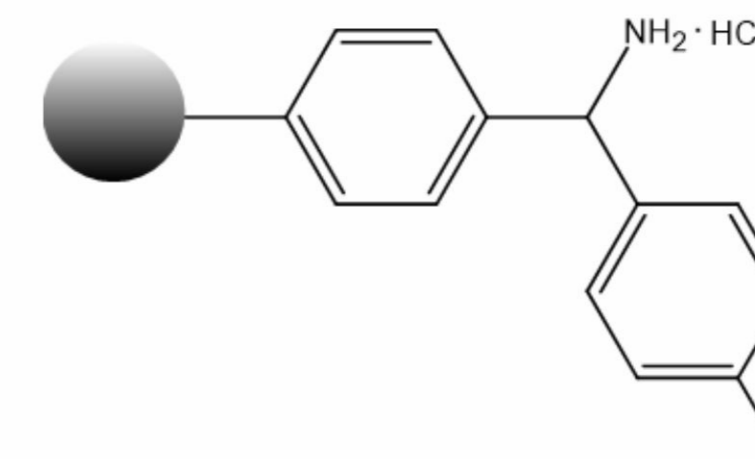
Product	Seplife® PAM Resin
Appearance	Off-white or light-yellow beads
Type	Gel type resin functionalized with hydroxyl groups
Matrix	PS/DVB
Substitution (mmol/g)	0.4-0.8; 0.8-1.2
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product Name	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® PAM Resin (0.4-0.8)	LXSS11-1-1401	100-200	75-150	0.4-0.8
Seplife® PAM Resin (0.8-1.2)	LXSS11-1-1402	100-200	75-150	0.8-1.2

## Seplife® MBHA Resin

Seplife® MBHA Resin (4-methylbenzhydrylamine hydrochloride salt resin) is used in the solid phase synthesis (SPPS) of amide peptides by Boc strategy. The method used to attach the first amino acid is ordinary amide bond forming conditions. For cleaving peptide products from MBHA the use of HF or trifluoromethanesulfonic acid (TFMSA) is required. It can also be used as a base for the incorporation of a great variety of linkers such as the Fmoc-Rink amide linker.



Product	Seplife® MBHA Resin
Appearance	Yellow beads
Type	Gel type resin functionalized with amino groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product Name	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® MBHA Resin (0.3-0.6)	LXSS06-1-1201	100-200	75-150	0.3-0.6
Seplife® MBHA Resin (0.6-0.8)	LXSS06-1-1202	100-200	75-150	0.6-0.8
Seplife® MBHA Resin (0.8-1.0)	LXSS06-1-1203	100-200	75-150	0.8-1.0
Seplife® MBHA Resin (1.0-1.2)	LXSS06-1-1204	100-200	75-150	1.0-1.2
Seplife® MBHA Resin (1.2-1.4)	LXSS06-1-1205	100-200	75-150	1.2-1.4
Seplife® MBHA Resin (1.4-1.6)	LXSS06-1-1206	100-200	75-150	1.4-1.6

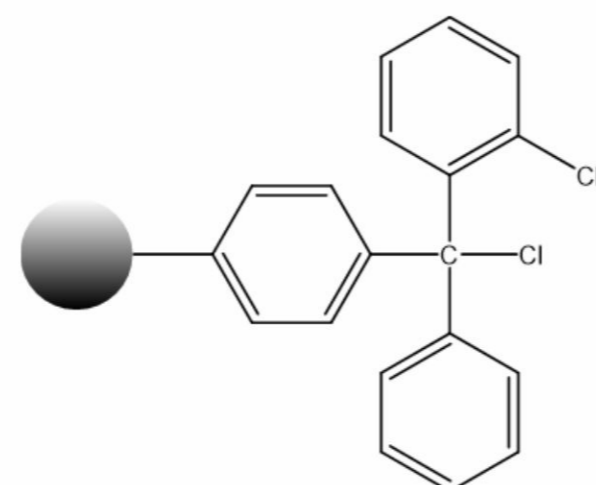


## Fmoc Chemistry-SPPS

Seplife® resins are a valuable tool in SPPS using Fmoc (9-fluorenylmethoxycarbonyl) chemistry, offering a range of benefits that enhance the overall efficiency and effectiveness of the process. Fmoc chemistry is widely used due to its compatibility with automated synthesizers and the ease of deprotection under mild conditions. Seplife® resins for Fmoc chemistry provide superior stability, swelling properties, and loading capacity. These resins facilitate optimal access to the reactive sites during coupling reactions, resulting in improved yields and purities of synthesized peptides. Moreover, they minimize the risk of aggregation and side reactions, which are common challenges in peptide synthesis.

### Seplife® 2-CTC Resin

Seplife® 2-CTC Resin (2-chlorotrityl chloride resin) is a very acid-labile resin for preparing peptides and partially protected peptide fragments by SPPS using the Fmoc strategy. This product is ideal for the preparation of peptides containing C-terminal Cys, His, Met, Tyr and Pro residues. The first amino acid is easily incorporated to the resin by chlorine displacement. Cleavage of the protected peptide from the 2-CTC resin can be achieved using low acid concentrations TFA and even with HFIP (hexafluoroisopropanol). Fully deprotected peptides can be cleaved from the Seplife 2-CTC Resin with 95% TFA.



Product	Seplife® 2-CTC Resin
Appearance	Yellow beads
Type	Gel type resin functionalized with active chlorine groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6; 1.6-1.9
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

#### • Ordering Information

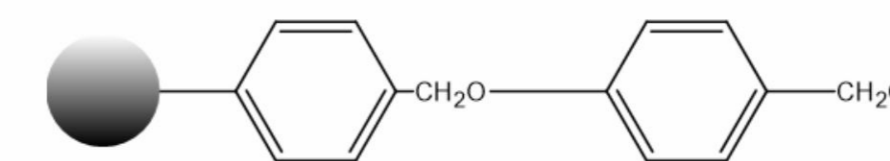
Product Name	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® 2-CTC Resin (0.4-0.6)	LXSS03-1-1201	100-200	75-150	0.4-0.6
Seplife® 2-CTC Resin (0.6-0.8)	LXSS03-1-1202	100-200	75-150	0.6-0.8
Seplife® 2-CTC Resin (0.8-1.0)	LXSS03-1-1203	100-200	75-150	0.8-1.0
Seplife® 2-CTC Resin (1.0-1.2)	LXSS03-1-1204	100-200	75-150	1.0-1.2
Seplife® 2-CTC Resin (1.2-1.4)	LXSS03-1-1205	100-200	75-150	1.2-1.4
Seplife® 2-CTC Resin (1.4-1.6)	LXSS03-1-1206	100-200	75-150	1.4-1.6
Seplife® 2-CTC Resin (1.6-1.9)	LXSS03-1-1207	100-200	75-150	1.4-1.9

### Seplife® Wang Resin

Seplife® Wang Resin (4-benzyloxybenzy alcohol resin) is the standard support for acid peptide synthesis by Fmoc strategy. The linker is bound to the resin through a phenyl ether bond, and the substrate is generally attached to the linker by a benzylic ester. The linkage between the first amino acid and the support has good stability to a variety of reaction conditions but can be readily cleaved by moderate treatment with an acid, such as 50% TFA in DCM.

The first amino acid is attached to Wang resin using an activating agent such as dicyclohexylcarbodiimide (DCC) and a catalytic amount of 4-dimethylamino-pyridine (DMAP). To avoid partial epimerization of the amino acid it is recommended to use HOBt that helps reducing racemization. Cys or His coupling might require different approach due to the well reported racemization. If DMF is used as the solvent in the coupling reaction, it should be degassed under vacuum or sparged with nitrogen first to remove any dimethylamine that may be contaminating it and that can cause removal of the Fmoc group and lead to C-terminal oligomeric impurities. After the first amino acid is attached, the resin should be end-capped with acetic anhydride to block any unreacted active groups on the resin.

Reference: [3]



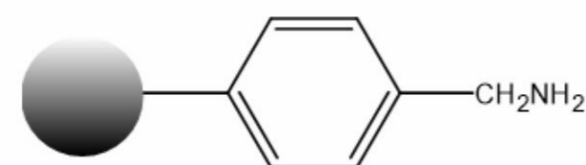
Product	Seplife® Wang Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with hydroxyl groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6; 1.6-2.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

#### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® Wang Resin (0.4-0.6)	LXSS04-1-1201	100-200	75-150	0.4-0.6
Seplife® Wang Resin (0.6-0.8)	LXSS04-1-1202	100-200	75-150	0.6-0.8
Seplife® Wang Resin (0.8-1.0)	LXSS04-1-1203	100-200	75-150	0.8-1.0
Seplife® Wang Resin (1.0-1.2)	LXSS04-1-1204	100-200	75-150	1.0-1.2
Seplife® Wang Resin (1.2-1.4)	LXSS04-1-1205	100-200	75-150	1.2-1.4
Seplife® Wang Resin (1.4-1.6)	LXSS04-1-1206	100-200	75-150	1.4-1.6
Seplife® Wang Resin (1.6-2.0)	LXSS04-1-1207	100-200	75-150	1.6-2.0

## Seplife® AM Resin

Seplife® AM Resin is one of the most widely used functionalized supports for solid-phase peptide synthesis. Many supports can be made by acylating this resin with carboxylic acid-containing linkers using standard methods of amide bond formation to generate various solid supports for SPPS. It is also used as a scavenger resin in solution phase synthesis to remove excess acids, alkylating agents and other electrophiles.



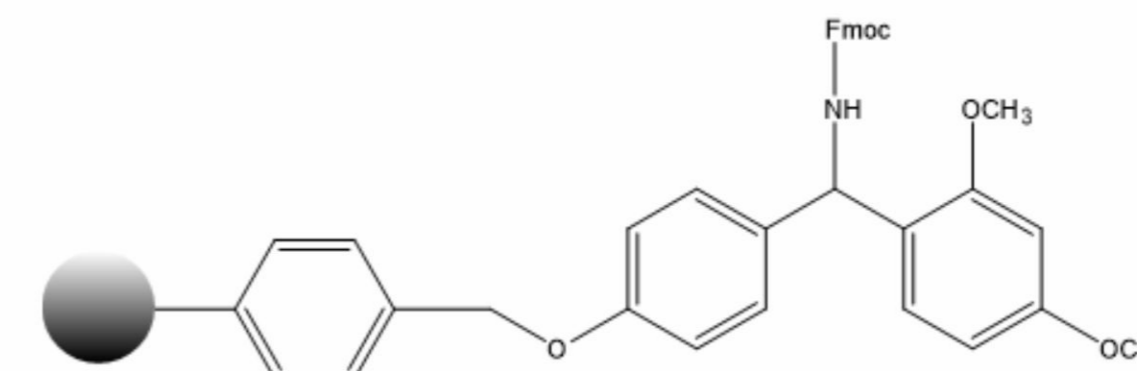
Product	Seplife® AM Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with amino groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6; 1.6-2.0; 2.0-2.4; 2.4-3.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® AM Resin (0.4-0.6)	LXSS05-1-1201	100-200	75-150	0.4-0.6
Seplife® AM Resin (0.6-0.8)	LXSS05-1-1202	100-200	75-150	0.6-0.8
Seplife® AM Resin (0.8-1.0)	LXSS05-1-1203	100-200	75-150	0.8-1.0
Seplife® AM Resin (1.0-1.2)	LXSS05-1-1204	100-200	75-150	1.0-1.2
Seplife® AM Resin (1.2-1.4)	LXSS05-1-1205	100-200	75-150	1.2-1.4
Seplife® AM Resin (1.4-1.6)	LXSS05-1-1206	100-200	75-150	1.4-1.6
Seplife® AM Resin (1.6-2.0)	LXSS05-1-1207	100-200	75-150	1.6-2.0
Seplife® AM Resin (2.0-2.4)	LXSS05-1-1208	100-200	75-150	2.0-2.4
Seplife® AM Resin (2.4-3.0)	LXSS05-1-1209	100-200	75-150	2.4-3.0

## Seplife® Rink Amide Resin

Seplife® Rink Amide Resin (4-(2',4'-Dimethoxyphenyl-Fmoc-aminomethyl)- phenoxyethyl resin) is an excellent support for the Fmoc SPPS of peptide amides. This resin is slightly more acid sensitive than Rink Amide-AM and Rink Amide-MBHA resins. Cleavage with high concentrations of TFA can lead to the breakdown of the linker, with the concomitant formation of by-products that cannot be removed by simple washes. These problems are minimized by the addition of trialkylsilanes or other scavengers to the cleavage mixture.



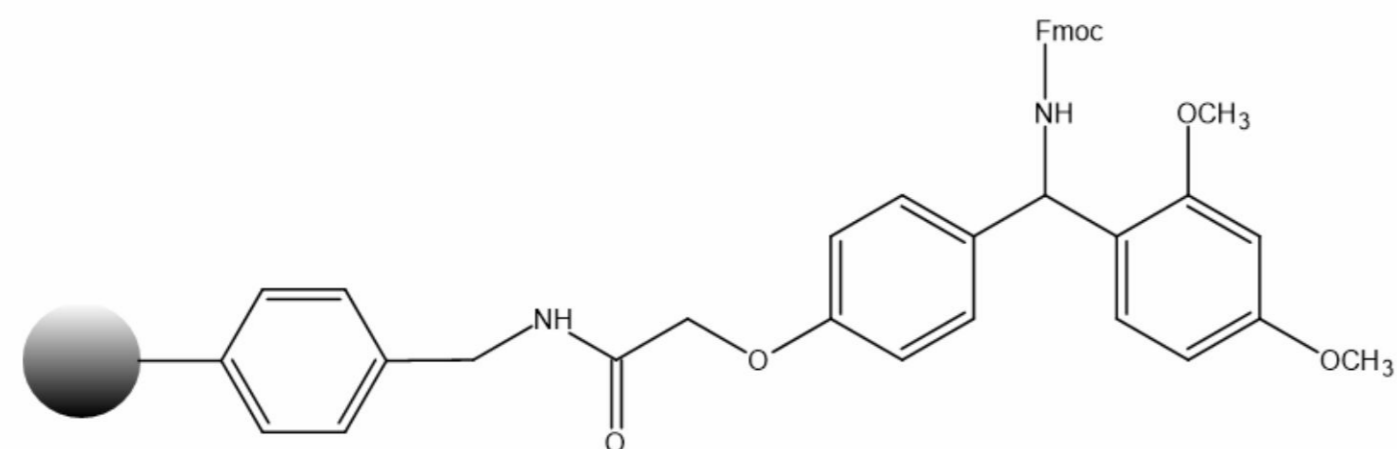
Product	Seplife® Rink Amide Resin
Appearance	Off white or light pink beads
Type	Gel type resin functionalized with Rink Amide linker
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® Rink Amide Resin (0.3-0.6)	LXSS07-1-1201	100-200	75-150	0.3-0.6
Seplife® Rink Amide Resin (0.6-0.8)	LXSS07-1-1202	100-200	75-150	0.6-0.8
Seplife® Rink Amide Resin (0.8-1.0)	LXSS07-1-1203	100-200	75-150	0.8-1.0

## Seplife® Rink Amide-AM Resin

Seplife® Rink Amide - AM Resin (4-(2',4'-dimethoxyphenyl-Fmoc-aminomethyl) phenoxyacetamido-AM resin) contains the Rink Amide linker attached to an aminomethyl resin and is an ideal tool for the Fmoc SPPS of peptide amides. Peptide cleavage from the resin is done with 95% TFA providing unprotected peptide amides with high yields and purities.



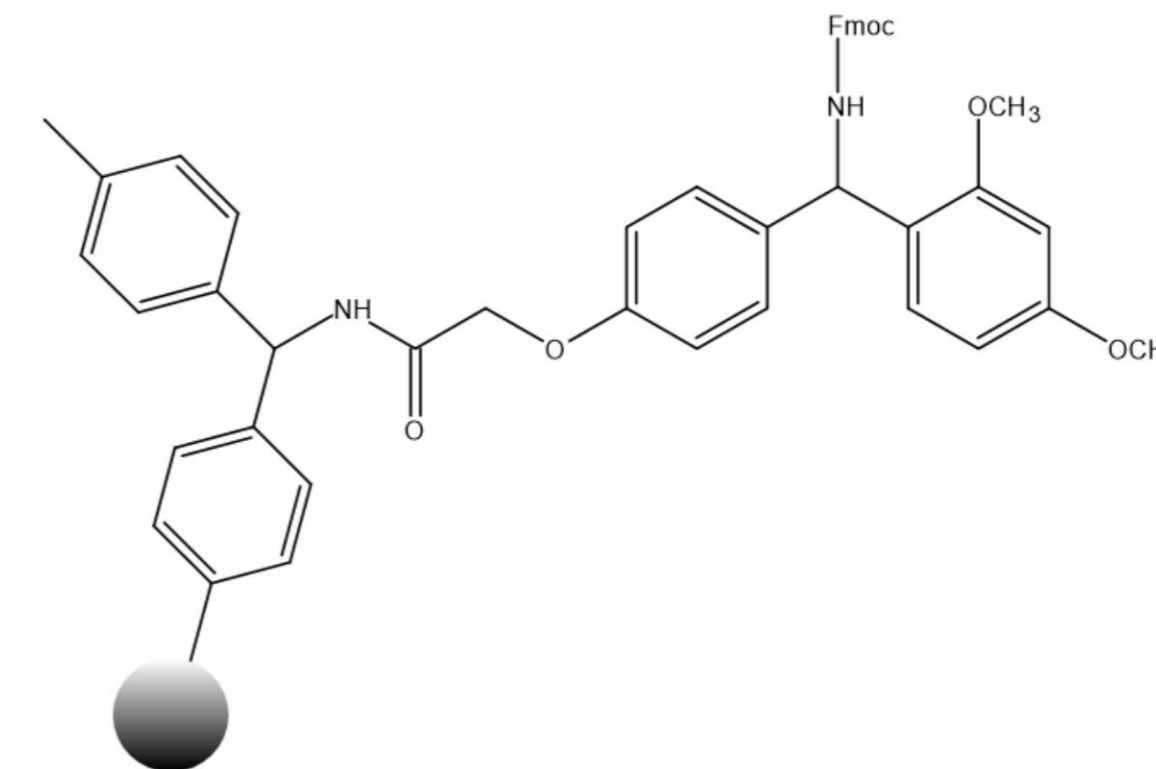
Product	Seplife® Rink Amide - AM Resin
Appearance	Off white or light-yellow beads
Type	Gel type resin functionalized with Rink linker groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® Rink Amide-AM Resin (0.3-0.6)	LXSS08-1-1201	100-200	75-150	0.3-0.6
Seplife® Rink Amide-AM Resin (0.6-0.8)	LXSS08-1-1202	100-200	75-150	0.6-0.8
Seplife® Rink Amide-AM Resin (0.8-1.0)	LXSS08-1-1203	100-200	75-150	0.8-1.0

## Seplife® Rink Amide-MBHA Resin

Seplife® Rink Amide-MBHA Resin (4-(2',4'-Dimethoxyphenyl-Fmoc-aminomethyl)-phenoxyacetamido-MBHA) contains the Rink Amide linker attached to a MBHA resin and is an ideal tool for the Fmoc solid phase peptide synthesis (SPPS) of amide peptides. Peptide cleavage from the resin is done with 95% TFA providing unprotected peptide amides with high yields and purities.



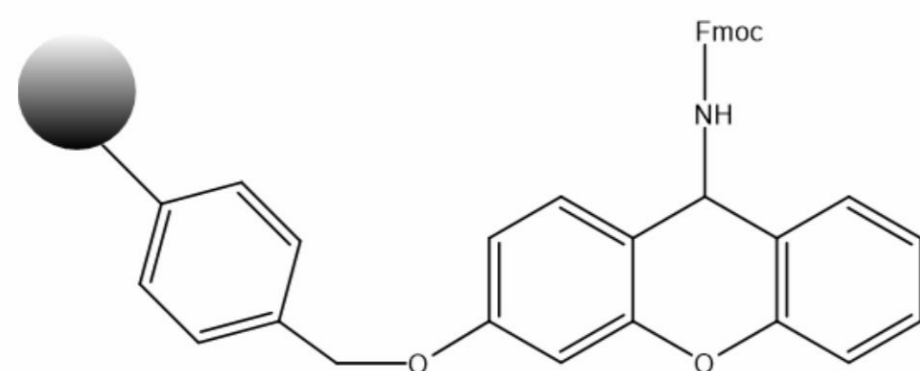
Product	Seplife® Rink Amide - MBHA Resin
Appearance	Off white or light-yellow beads
Type	Gel type resin functionalized with Rink linker groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® Rink Amide-MBHA Resin (0.3-0.6)	LXSS09-1-1201	100-200	75-150	0.3-0.6
Seplife® Rink Amide-MBHA Resin (0.6-0.8)	LXSS09-1-1202	100-200	75-150	0.6-0.8
Seplife® Rink Amide-MBHA Resin (0.8-1.0)	LXSS09-1-1203	100-200	75-150	0.8-1.0

## Seplife® Sieber Resin

Seplife® Sieber Resin is a very acid-labile resin used for preparing peptide amides and partially protected peptide amide fragments by solid phase peptide synthesis (SPPS) using the Fmoc strategy. Cleavage of the protected peptide from the Sieber resin can be achieved using low TFA concentrations (1-2%) while fully deprotected peptides can be cleaved from the SPPS resin Seplife® Sieber Resin with 95% TFA. The resin can be readily reductively alkylated to provide a support suited to the synthesis of secondary carboxamides. Seplife® Sieber Resin has also been employed to produce protected peptide fragments in which the C-terminal carboxylic acid group is blocked as hydroxymethyl phenoxy-beta moiety.



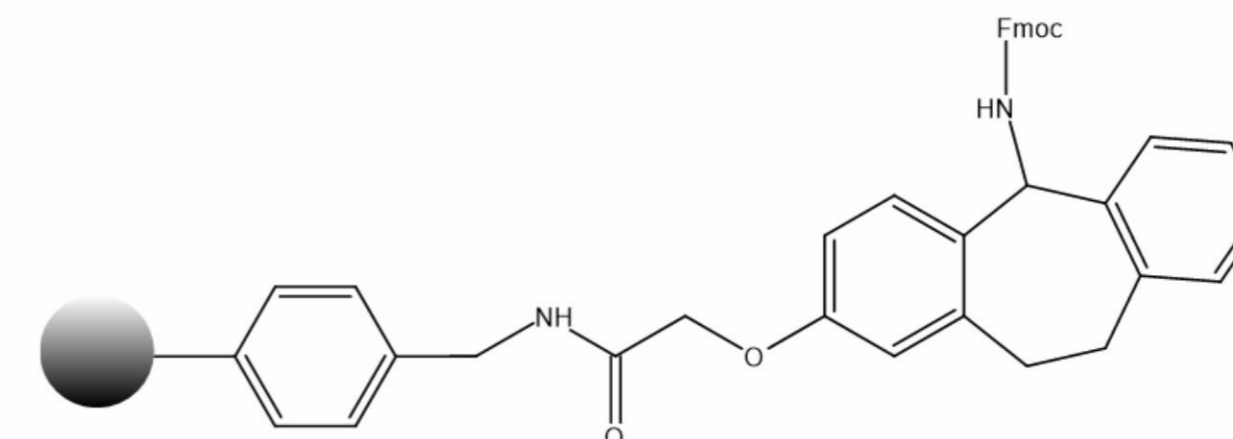
Product	Seplife® Sieber Resin
Appearance	Off white or light-yellow beads
Type	Gel type resin functionalized with Fmoc - NH <sub>2</sub> groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.2-0.4; 0.4-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® Sieber Resin (0.2-0.4)	LXSS10-1-1401	100-200	75-150	0.2-0.4
Seplife® Sieber Resin (0.4-0.6)	LXSS10-1-1402	100-200	75-150	0.4-0.6
Seplife® Sieber Resin (0.6-0.8)	LXSS10-1-1403	100-200	75-150	0.6-0.8
Seplife® Sieber Resin (0.8-1.0)	LXSS10-1-1404	100-200	75-150	0.8-1.0

## Seplife® Ramage Resin

Seplife® Ramage Resin (2-[(R,S)-5-(9-fluorenylmethoxycarbonyl-amino)-10,11-dihydro-5H-dibenzo[a,d]cycloheptene-2-yl]oxy)acetyl-AM resin) contains a dibenzocycloheptadiene linker attached to aminomethylated polystyrene. Following Fmoc removal, the resin can be acylated under standard conditions and used in Fmoc SPPS. The linker is considerably more acid sensitive than the Rink amide which enables peptide amides to be cleaved from the resin using with 30% TFA in DCM allowing for the preparation of acid sensitive peptides. Ramage resin is particularly recommended for C-terminal Phe, Tyr and Ile.



Product	Seplife® Ramage Resin
Appearance	Off white or light-yellow beads
Type	Gel type resin functionalized with Fmoc-NH <sub>2</sub> groups
Matrix	1% DVB/polystyrene
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

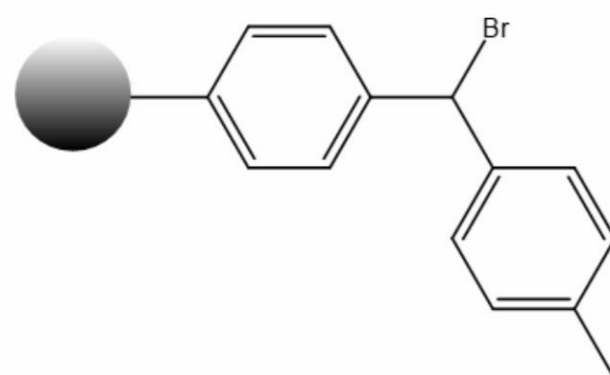
### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® Ramage Resin (0.3-0.6)	LXSS14-1-1401	100-200	75-150	0.3-0.6
Seplife® Ramage Resin (0.6-0.8)	LXSS14-1-1402	100-200	75-150	0.6-0.8
Seplife® Ramage Resin (0.8-1.0)	LXSS14-1-1403	100-200	75-150	0.8-1.0

## Seplife® MBH Br Resin

Seplife® MBH Br Resin (4-Methylbenzhydryl bromide resin) is an acid-labile resin for the solid phase synthesis of acid peptides and protected peptide fragments by the Fmoc strategy, it is more stable to acidolytic cleavage compared to the 2-CTC resin, reducing the premature peptide release in presence of acidic additive, such as Oxyma Pure. The first amino acid is easily incorporated to the resin by bromine displacement. Cleavage of the protected peptide from the Seplife® MBH Br resin can be achieved using 2% TFA/DCM. Fully deprotected peptides can be cleaved from the MBH Br with 95% TFA.

Reference: [4]



Product	Seplife® MBH Br Resin
Appearance	Yellow to Red Brown beads
Type	Gel type resin functionalized with active bromine groups
Matrix	PS/DVB
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® MBH Br Resin (0.4-0.6)	LXSS47-1-2401	100-200	75-150	0.4-0.6
Seplife® MBH Br Resin (0.6-0.8)	LXSS47-1-2402	100-200	75-150	0.6-0.8
Seplife® MBH Br Resin (0.8-1.0)	LXSS47-1-2403	100-200	75-150	0.8-1.0
Seplife® MBH Br Resin (1.0-1.2)	LXSS47-1-2404	100-200	75-150	1.0-1.2
Seplife® MBH Br Resin (1.2-1.4)	LXSS47-1-2405	100-200	75-150	1.2-1.4
Seplife® MBH Br Resin (1.4-1.6)	LXSS47-1-2406	100-200	75-150	1.4-1.6

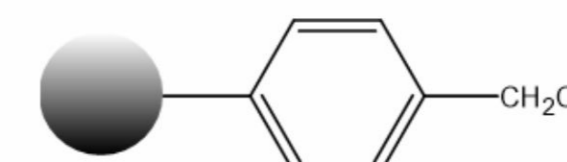


## UNI Polystyrene Resins

Sunresin has developed a novel approach to introduce functional groups into polymer beads through copolymerization. This novel technology is a superior approach to the traditional method of taking a polystyrene particle and further functionalize it. This novel method of copolymerization/functionalization approach results in a more uniform and stable distribution of active sites, easier control, better reproducibility, and the ability to avoid the introduction of by-products. This product line includes UNI Resins.

### Seplife® UNI-Merrifield Resin

Seplife® UNI-Merrifield Resin is made of a uniform particle size range (75-150 micron), functionalized by copolymerization and can be used for the peptide synthesis by BOC-SPPS strategy. The first amino acid is attached to Merrifield resins by nucleophilic displacement of chlorine. The resulting resin-substrate bond is stable in mild acids such as trifluoroacetic acid (TFA) and requires strong acid conditions for cleavage such as HF or TFMSA (trifluoromethanesulfonic acid).



Product	Seplife® UNI-Merrifield Resin
Appearance	Off-White or Light-Yellow beads
Type	Gel type resin functionalized with chloromethyl groups
Matrix	PS/DVB
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

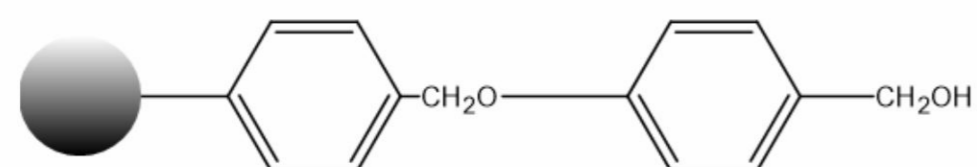
### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® UNI-Merrifield Resin (0.4-0.6)	LXSSUNI02-1-1201	100-200	75-150	0.4-0.6
Seplife® UNI-Merrifield Resin (0.6-0.8)	LXSSUNI02-1-1202	100-200	75-150	0.6-0.8
Seplife® UNI-Merrifield Resin (0.8-1.0)	LXSSUNI02-1-1203	100-200	75-150	0.8-1.0
Seplife® UNI-Merrifield Resin (1.0-1.2)	LXSSUNI02-1-1204	100-200	75-150	1.0-1.2
Seplife® UNI-Merrifield Resin (1.2-1.4)	LXSSUNI02-1-1205	100-200	75-150	1.2-1.4
Seplife® UNI-Merrifield Resin (1.4-1.6)	LXSSUNI02-1-1206	100-200	75-150	1.4-1.6

## Seplife® UNI-Wang Resin

Seplife® UNI-Wang Resin (4-benzyloxybenzy alcohol resin) is made of a uniform particle size range (75-150 micron) functionalized through copolymerization and can be used as standard support for acid peptide synthesis by Fmoc strategy. The linkage between the first amino acid and the support has good stability to a variety of reaction conditions but can be readily cleaved by moderate treatment with an acid, such as 50% TFA in DCM.

The first amino acid is attached to Wang resin using an activating agent such as dicyclohexylcarbodiimide (DCC) and a catalytic amount of 4-dimethylamino-pyridine (DMAP). To avoid partial epimerization of the amino acid it is recommended to use HOBt that helps reducing racemization. Cys or His coupling might require different approach due to the well reported racemization. If DMF is used as the solvent in the coupling reaction, it should be degassed under vacuum or sparged with nitrogen first to remove any dimethylamine that may be contaminating it and that can cause removal of the Fmoc group and lead to C-terminal oligomeric impurities. After the first amino acid is attached, the resin should be end-capped with acetic anhydride to block any unreacted active groups on the resin.



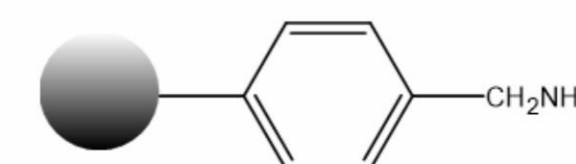
Product	Seplife® UNI-Wang Resin
Appearance	Light Yellow or Yellow beads
Type	Gel type resin functionalized with Hydroxyl groups
Matrix	PS/DVB
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® UNI-Wang Resin (0.4-0.6)	LXSSUNI04-1-1201	100-200	75-150	0.4-0.6
Seplife® UNI-Wang Resin (0.6-0.8)	LXSSUNI04-1-1202	100-200	75-150	0.6-0.8
Seplife® UNI-Wang Resin (0.8-1.0)	LXSSUNI04-1-1203	100-200	75-150	0.8-1.0
Seplife® UNI-Wang Resin (1.0-1.2)	LXSSUNI04-1-1204	100-200	75-150	1.0-1.2
Seplife® UNI-Wang Resin (1.2-1.4)	LXSSUNI04-1-1205	100-200	75-150	1.2-1.4

## Seplife® UNI-AM Resin

Seplife® UNI-AM Resin (aminomethyl resin) is made of a uniform particle size range (75-150 micron), is functionalized by copolymerization and is one of the most widely used functionalized supports for solid-phase synthesis. Seplife® UNI-AM Resin is the core resin to which various linkers could be attached through a stable amide bond. Particularly, the incorporation of the Fmoc-Rink amide linker renders the resin optimal for the preparation of amide peptides by Fmoc-based strategy. It is also used as a scavenger resin in solution phase synthesis to remove excess acids, alkylating agents and other electrophiles.



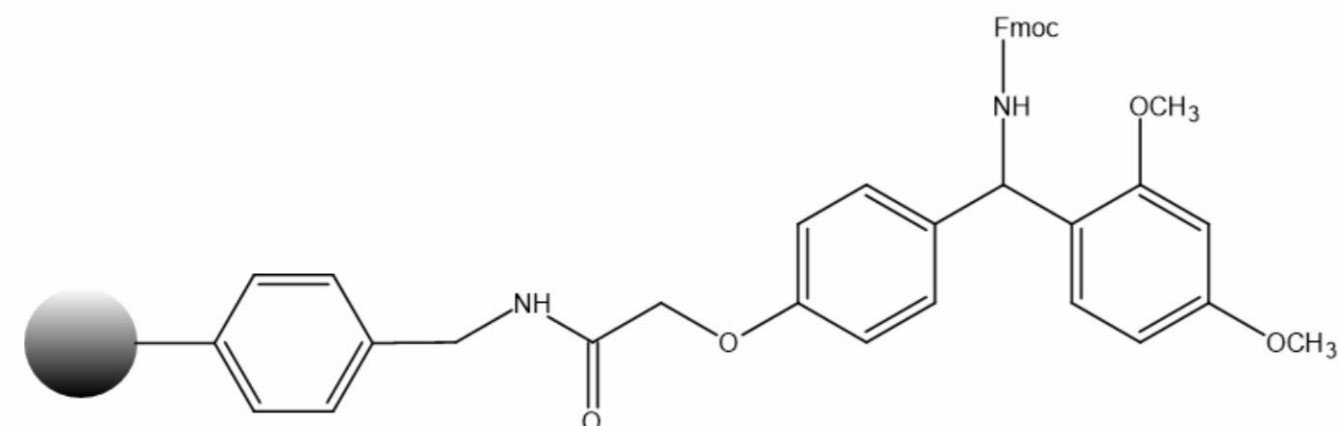
Product	Seplife® UNI-AM Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with Amino groups
Matrix	PS/DVB
Substitution (mmol/g)	0.4-0.6; 0.6-0.8; 0.8-1.0; 1.0-1.2; 1.2-1.4; 1.4-1.6
Particle size (mesh)	100 - 200
Particle size (micron)	75 - 150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® UNI-AM Resin (0.4-0.6)	LXSSUNI05-1-1201	100-200	75-150	0.4-0.6
Seplife® UNI-AM Resin (0.6-0.8)	LXSSUNI05-1-1202	100-200	75-150	0.6-0.8
Seplife® UNI-AM Resin (0.8-1.0)	LXSSUNI05-1-1203	100-200	75-150	0.8-1.0
Seplife® UNI-AM Resin (1.0-1.2)	LXSSUNI05-1-1204	100-200	75-150	1.0-1.2
Seplife® UNI-AM Resin (1.2-1.4)	LXSSUNI05-1-1205	100-200	75-150	1.2-1.4
Seplife® UNI-AM Resin (1.4-1.6)	LXSSUNI05-1-1206	100-200	75-150	1.4-1.6

## Seplife® UNI Rink Amide-AM Resin

Seplife® UNI Rink Amide-AM Resin (4-(2',4'-dimethoxyphenyl-Fmoc-aminomethyl)- phenoxyacetamido-AM resin) is made of a uniform particle size range (75-150 micron) functionalized by copolymerization and contains the Rink Amide linker attached to Seplife® UNI-AM resin. It is the ideal tool for the Fmoc SPPS of peptide amides. Peptide cleavage from the resin is done with 95% TFA providing unprotected peptide amides with high yields and purities.



Product	Seplife® UNI-Rink Amide-AM Resin
Appearance	Off-White or Light Yellow beads
Type	Gel type resin functionalized with Rink Linker groups
Matrix	PS/DVB
Substitution (mmol/g)	0.3-0.6; 0.6-0.8; 0.8-1.0
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Substitution (mmol/g resin)
Seplife® UNI-Rink Amide-AM Resin (0.3-0.6)	LXSSUNI08-1-1201	100-200	75-150	0.3-0.6
Seplife® UNI-Rink Amide-AM Resin (0.6-0.8)	LXSSUNI08-1-1202	100-200	75-150	0.6-0.8
Seplife® UNI-Rink Amide-AM Resin (0.8-1.0)	LXSSUNI08-1-1203	100-200	75-150	0.8-1.0



## DEG Resins

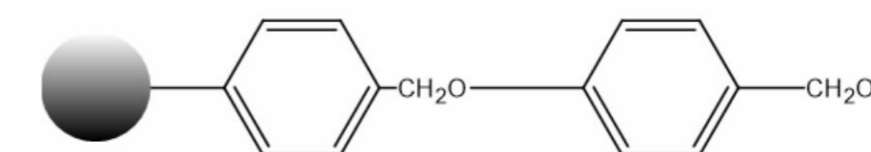
Sunresin has developed a new type of polymer by replacing the cross-linking agent divinylbenzene in traditional solid-phase synthesis carriers with diethylene glycol dimethacrylate (DEG), which has a longer molecular chain and greater flexibility, improves the extensibility of the styrene cross-linking network, enhances the solubility of the resin, and increases site accessibility.

Diethylene glycol dimethacrylate (DEG) - crosslinked polystyrene (PS) resins offer significant advantages over traditional divinyl benzene (DVB) - PS resins in solid phase peptide synthesis, providing higher yields, better purity, and alignment with green chemistry principles partially due to a more hydrophilic matrix provided by the DEG copolymer.

Reference: [5]

## Seplife® DEG-Wang Resin

Seplife® DEG-Wang Resin is made using polystyrene crosslinked with diethylene glycol dimethacrylate (DEG) and has hydroxyl functional groups and can be used as a standard support for acid peptide synthesis by Fmoc strategy. The linkage between the first amino acid and the support has good stability to a variety of reaction conditions but can be readily cleaved by moderate treatment with an acid, such as 50% TFA in DCM.



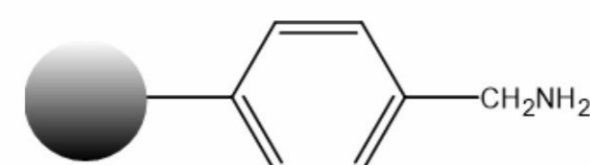
Product	Seplife® DEG-Wang Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with hydroxyl groups
Matrix	Polystyrene / Diethylene glycol dimethacrylate
Substitution (mmol/g)	0.4-0.8; 0.8-1.2; 1.2-1.6; 1.6-2.0
Particle size (mesh/micron)	100-200 / 75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® DEG-Wang Resin (0.4-0.8)	LXSS26-1-1401	100-200	75-150	0.4-0.8
Seplife® DEG-Wang Resin (0.8-1.2)	LXSS26-1-1402	100-200	75-150	0.8-1.2
Seplife® DEG-Wang Resin (1.2-1.6)	LXSS26-1-1403	100-200	75-150	1.2-1.6
Seplife® DEG-Wang Resin (1.6-2.0)	LXSS26-1-1404	100-200	75-150	1.6-2.0

## Seplife® DEG-AM Resin

Seplife® DEG-AM Resin (DEG Aminomethyl Resin) is made using polystyrene crosslinked with diethylene glycol dimethacrylate (DEG) and has an amino group to which various linkers could be attached through a stable amide bond. Particularly, the incorporation of the Fmoc-Rink Amide linker renders the resin optimal for the preparation of amide peptides by a Fmoc based strategy.



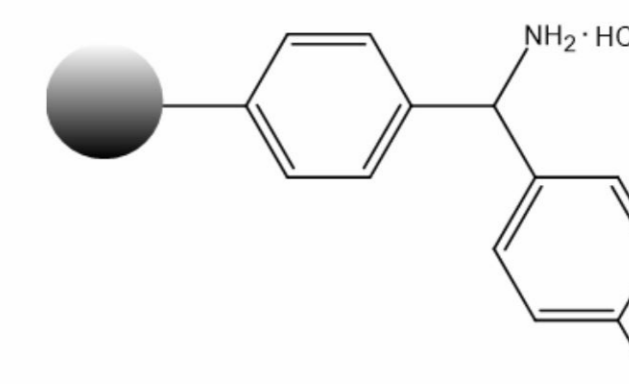
Product	Seplife® DEG-AM Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with amino groups
Matrix	Polystyrene / Diethylene glycol dimethacrylate
Substitution (mmol/g)	0.5-1.0; 1.0-1.5; 1.5-2.0
Particle size (mesh/micron)	100-200 / 75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® DEG-AM Resin (0.5-1.0)	LXSS22-1-1401	100-200	75-150	0.5-1.0
Seplife® DEG-AM Resin (1.0-1.5)	LXSS22-1-1402	100-200	75-150	1.0-1.5
Seplife® DEG-AM Resin (1.5-2.0)	LXSS22-1-1403	100-200	75-150	1.5-2.0

## Seplife® DEG-MBHA Resin

Seplife® DEG-MBHA Resin (4-methylbenzhydrylamine hydrochloride salt resin) is made using polystyrene crosslinked with diethylene glycol dimethacrylate (DEG) and is used in the solid phase synthesis of amide peptides by Boc strategy. The method used to attach the first amino acid is ordinary amide bond forming conditions. For cleaving peptide products from MBHA the use of HF or trifluoromethanesulfonic acid (TFMSA) is required. It can also be used as a base for the incorporation of a great variety of linkers such as the Fmoc-Rink amide linker.



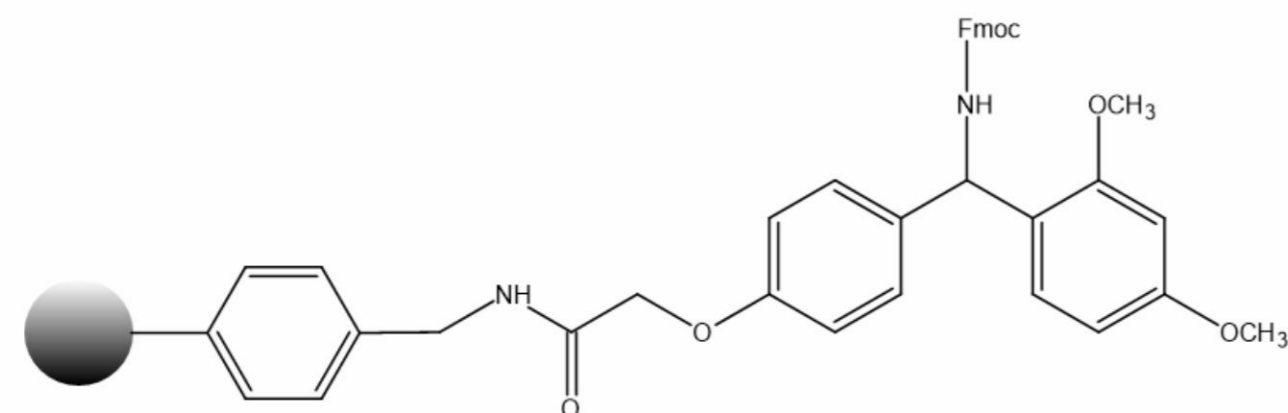
Product	Seplife® DEG-MBHA Resin
Appearance	Yellow beads
Type	Gel type resin functionalized with Amino groups
Matrix	PS/DEG
Substitution (mmol/g)	0.5-1.0; 1.0-1.5
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® DEG-MBHA Resin (0.5-1.0)	LXSS52-1-1401	100-200	75-150	0.5-1.0
Seplife® DEG-MBHA Resin (1.0-1.5)	LXSS52-1-1402	100-200	75-150	1.0-1.5

## Seplife® DEG-Rink Amide-AM Resin

Seplife® DEG-Rink Amide - AM Resin (4-(2',4'-dimethoxyphenyl-Fmoc-aminomethyl)- phenoxyacetamido-AM resin) is made using polystyrene crosslinked with diethylene glycol dimethacrylate (DEG) and contains the Rink Amide linker attached to an aminomethyl resin and is an ideal tool for the Fmoc SPPS of peptide amides. Peptide cleavage from the resin is done with 95% TFA providing unprotected peptide amides with high yields and purities.



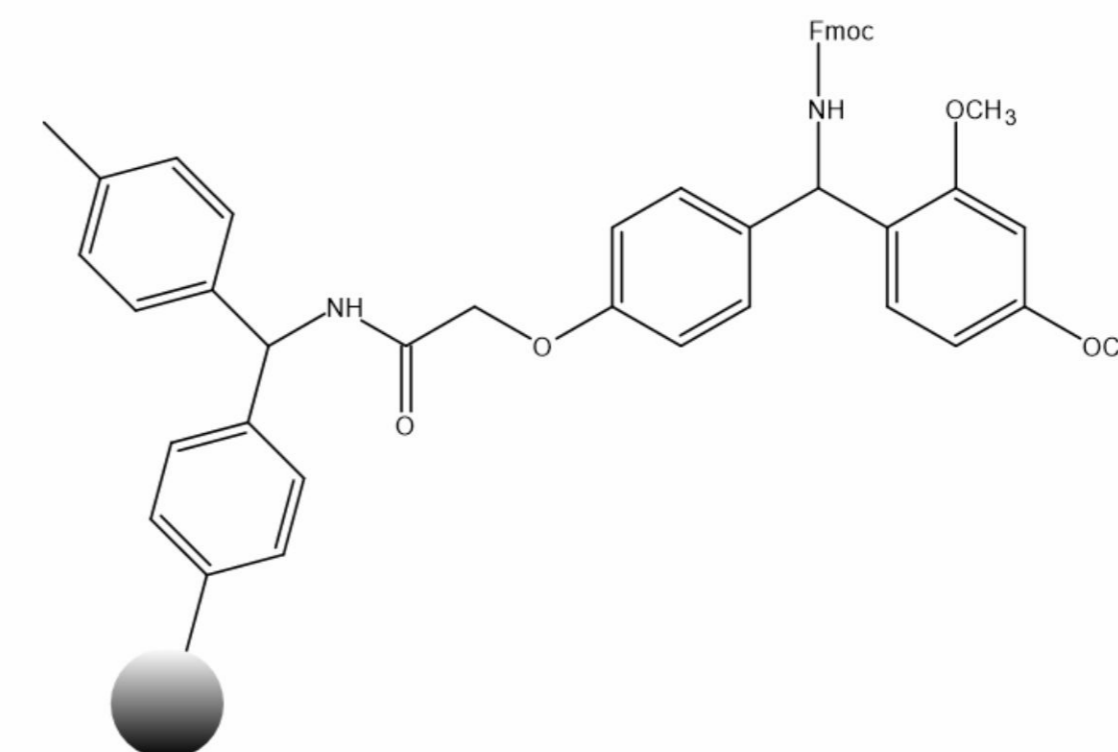
Product	Seplife® DEG-Rink Amide-AM Resin
Appearance	Off-White or Light Yellow beads
Type	Gel type resin functionalized with Rink Linker groups
Matrix	PS/DEG
Substitution (mmol/g)	0.3-0.6; 0.6-0.8
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® DEG-Rink Amide-AM Resin (0.3-0.6)	LXSS24-1-1401	100-200	75-150	0.3-0.6
Seplife® DEG-Rink Amide-AM Resin (0.6-0.8)	LXSS24-1-1402	100-200	75-150	0.6-0.8

## Seplife® DEG-Rink Amide-MBHA Resin

Seplife® DEG-Rink Amide-MBHA Resin (4-(2',4'-dimethoxyphenyl-Fmoc-aminomethyl)- phenoxyacetamido-MBHA resin) is made using polystyrene crosslinked with diethylene glycol dimethacrylate (DEG) and contains the Rink Amide linker attached to a MBHA resin and is an ideal tool for the Fmoc solid phase peptide synthesis (SPPS) of amide peptides. Peptide cleavage from the resin is done with 95% TFA providing unprotected peptide amides with high yields and purities.



Product	Seplife® DEG-Rink Amide-MBHA Resin
Appearance	Off-White or Light Yellow beads
Type	Gel type resin functionalized with Rink Linker groups
Matrix	PS/DEG
Substitution (mmol/g)	0.3-0.6; 0.6-0.8
Particle size (mesh)	100-200
Particle size (micron)	75-150
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(mesh)	Particle size(micron)	Loading (mmol/g resin)
Seplife® DEG-Rink Amide-MBHA Resin (0.3-0.6)	LXSS54-1-1401	100-200	75-150	0.3-0.6
Seplife® DEG-Rink Amide-MBHA Resin (0.6-0.8)	LXSS54-1-1402	100-200	75-150	0.6-0.8



## PS-PEG Resins

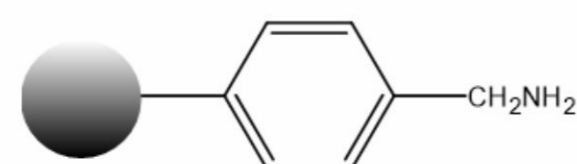
Seplife® PS-PEG resins consist of a low crosslinked polystyrene matrix on which polyethylene glycol (PEG) is grafted via an ethyl ether group which increases stability towards acid treatment and minimizes PEG leaching. The grafted copolymer shows modified physico-chemical properties which are highly dominated by the PEG moiety and has combined hydrophobic and hydrophilic properties.

PS-PEG resins exhibit high diffusivity and excellent swelling properties in various solvents ranging from dichloromethane to water, and possesses good rigidity and mechanical stability, making it suitable for large-scale peptide synthesis.

Reference: [6]

### Seplife® PS-PEG AM Resin

Seplife® PS-PEG resins consist of a low crosslinked polystyrene matrix on which polyethylene glycol (PEG) is grafted. Seplife® PS-PEG AM resin has an amino group to which various linkers could be attached through a stable amide bond. Particularly, the incorporation of the Fmoc-Rink Amide linker renders the resin optimal for the preparation of amide peptides by a Fmoc based strategy.



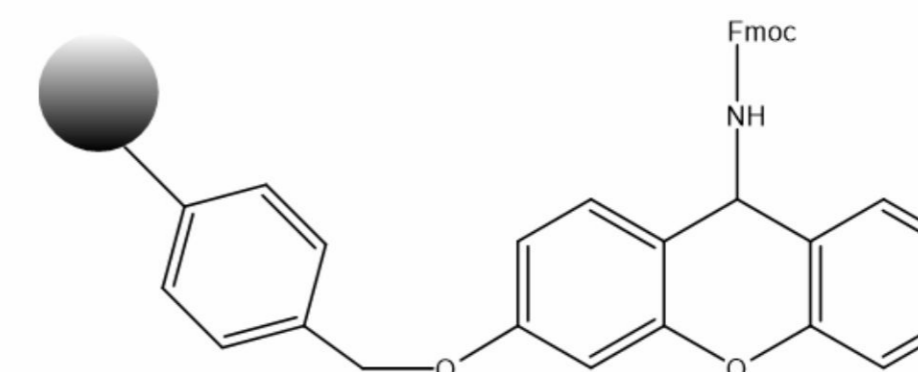
Product	Seplife® PS-PEG AM Resin
Appearance	Light-yellow or yellow beads
Type	Gel type resin functionalized with amino groups
Matrix	Crosslinked polystyrene grafted with polyethylene glycol
Substitution (mmol/g)	<0.2; 0.2-0.3; 0.3-0.4; 0.4-0.5; 0.5-0.6
Particle size (mesh)	60-150
Particle size (micron)	100-250
Shipped as	Dry

#### • Ordering Information

Product	Product Code	Particle size(micron)	Loading (mmol/g resin)
Seplife® PS-PEG AM Resin (<0.2)	LXHSS02-M-01	100-250(μm)	<0.2
Seplife® PS-PEG AM Resin (0.2-0.3)	LXHSS02-M-02	100-250(μm)	0.2-0.3
Seplife® PS-PEG AM Resin (0.3-0.4)	LXHSS02-M-03	100-250(μm)	0.3-0.4
Seplife® PS-PEG AM Resin (0.4-0.5)	LXHSS02-M-04	100-250(μm)	0.4-0.5
Seplife® PS-PEG AM Resin (0.5-0.6)	LXHSS02-M-05	100-250(μm)	0.5-0.6

### Seplife® PS-PEG Sieber Resin

Seplife® PS-PEG resins consist of a low crosslinked polystyrene matrix on which polyethylene glycol (PEG) is grafted. Seplife® PS-PEG Sieber resin contains the Sieber amide (xanthenyl) linker attached to the resin via an amide bond. This resin is ideal for the synthesis of partially protected amide peptides for which cleavage is possible using 1-4% TFA in DCM. As the Sieber linker provides less steric hindrance compared to the Rink handle, bulky building blocks can be attached to the resin easier and with higher yields.



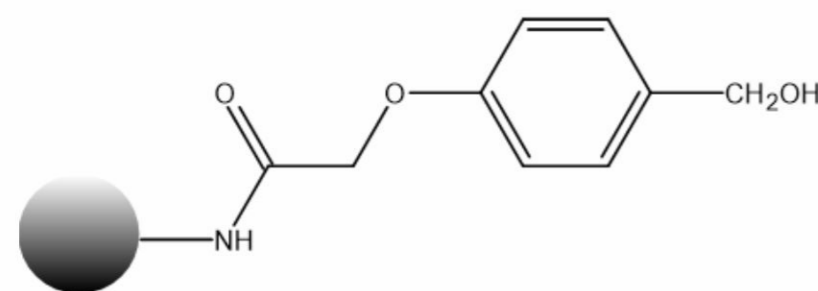
Product	Seplife® PS-PEG Sieber Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with Sieber NH-Fmoc linker
Matrix	Crosslinked polystyrene grafted with polyethylene glycol
Substitution (mmol/g)	<0.2 0.2-0.3; 0.3-0.4; 0.4-0.5; 0.5-0.6
Particle size (mesh)	60-150
Particle size (micron)	100-250
Shipped as	Dry

#### • Ordering Information

Product	Product Code	Particle size(micron)	Loading (mmol/g resin)
Seplife® PS-PEG Sieber Resin (<0.2)	LXHSS06-M-01	100-250(μm)	<0.2
Seplife® PS-PEG Sieber Resin (0.2-0.3)	LXHSS06-M-02	100-250(μm)	0.2-0.3
Seplife® PS-PEG Sieber Resin (0.3-0.4)	LXHSS06-M-03	100-250(μm)	0.3-0.4
Seplife® PS-PEG Sieber Resin (0.4-0.5)	LXHSS06-M-04	100-250(μm)	0.4-0.5
Seplife® PS-PEG Sieber Resin (0.5-0.6)	LXHSS06-M-05	100-250(μm)	0.5-0.6

## Seplife® PS-PEG HMPA Resin

Seplife® PS-PEG resins consist of a low crosslinked polystyrene matrix on which polyethylene glycol (PEG) is grafted. Seplife® PS-PEG HMPA resin is derived from Seplife® PS-PEG AM resin by coupling with the TFA-labile 4-(hydroxymethyl)-phenoxyacetic (HMPA) acid linker. The first amino acid is attached by an appropriate esterification reaction. Cleavage from this support is achieved by 95% TFA and produces acid peptides.



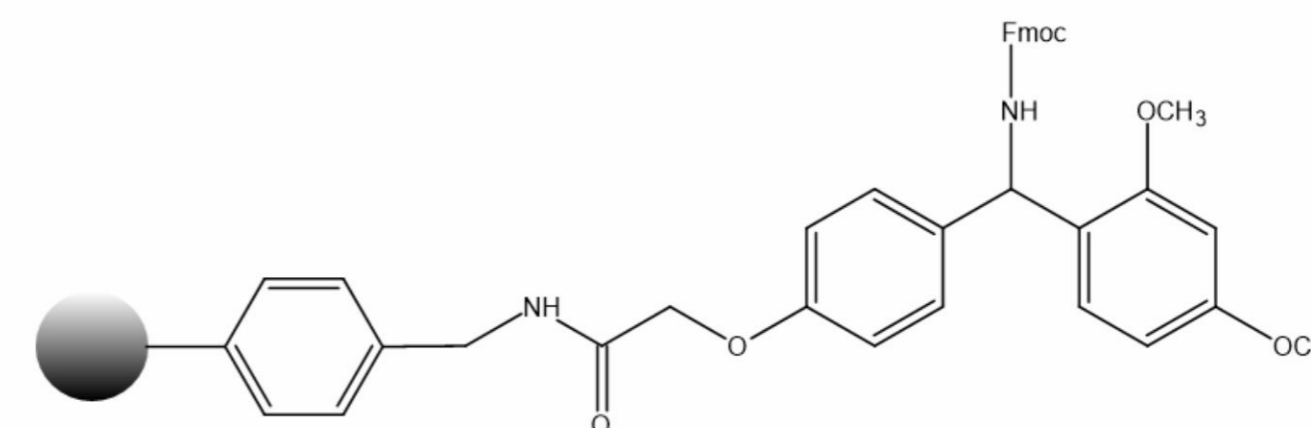
Product	Seplife® PS-PEG HMPA Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with HMPA linker
Matrix	Crosslinked polystyrene grafted with polyethylene glycol
Substitution (mmol/g)	<0.2; 0.2-0.3; 0.3-0.4; 0.4-0.5; 0.5-0.6
Particle size (mesh)	60-150
Particle size (micron)	100-250
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(micron)	Loading (mmol/g resin)
Seplife® PS-PEG HMPA Resin (<0.2)	LXHSS04-M-01	100-250(μm)	<0.2
Seplife® PS-PEG HMPA Resin (0.2-0.3)	LXHSS04-M-02	100-250(μm)	0.2-0.3
Seplife® PS-PEG HMPA Resin (0.3-0.4)	LXHSS04-M-03	100-250(μm)	0.3-0.4
Seplife® PS-PEG HMPA Resin (0.4-0.5)	LXHSS04-M-04	100-250(μm)	0.4-0.5
Seplife® PS-PEG HMPA Resin (0.5-0.6)	LXHSS04-M-05	100-250(μm)	0.5-0.6

## Seplife® PS-PEG Rink-Amide AM Resin

Seplife® PS-PEG resins consist of a low crosslinked polystyrene matrix on which polyethylene glycol (PEG) is grafted. Seplife® PS-PEG Rink Amide-AM resin is functionalized with a modified Rink Amide linker and is ideal for the Fmoc SPPS of peptide amides. Peptide cleavage from this support is achieved by 95% TFA.



Product	Seplife® PS-PEG Rink Amide-AM Resin
Appearance	Light yellow or yellow beads
Type	Gel type resin functionalized with Rink linker
Matrix	Crosslinked polystyrene grafted with polyethylene glycol
Substitution (mmol/g)	<0.2 0.2-0.3; 0.3-0.4; 0.4-0.5
Particle size (mesh)	60-150
Particle size (micron)	100-250
Shipped as	Dry

### • Ordering Information

Product	Product Code	Particle size(micron)	Loading (mmol/g resin)
Seplife® PS-PEG Rink Amide-AM Resin (<0.2)	LXHSS03-M-01	100-250(μm)	<0.2
Seplife® PS-PEG Rink Amide-AM Resin (0.2-0.3)	LXHSS03-M-02	100-250(μm)	0.2-0.3
Seplife® PS-PEG Rink Amide-AM Resin (0.3-0.4)	LXHSS03-M-03	100-250(μm)	0.3-0.4
Seplife® PS-PEG Rink Amide-AM Resin (0.4-0.5)	LXHSS03-M-04	100-250(μm)	0.4-0.5



## Pre-loaded AA Resins

### 1. Boc-AA-Merrifield Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Boc-Ala-Merrifield Resin	LXSSBM01	100-200	0.3-0.6 0.6-0.8
Boc-Arg(Tos)-Merrifield Resin	LXSSBM02	100-200	0.3-0.6 0.6-0.8
Boc-Asn-Merrifield Resin	LXSSBM03	100-200	0.3-0.6 0.6-0.8
Boc-Asp(OBzl)-Merrifield Resin	LXSSBM04	100-200	0.3-0.6 0.6-0.8
Boc-Cys(Acm)-Merrifield Resin	LXSSBM05	100-200	0.3-0.6 0.6-0.8
Boc-Gln-Merrifield Resin	LXSSBM06	100-200	0.3-0.6 0.6-0.8
Boc-Glu(OBzl)-Merrifield Resin	LXSSBM07	100-200	0.3-0.6 0.6-0.8
Boc-Gly-Merrifield Resin	LXSSBM08	100-200	0.3-0.6 0.6-0.8
Boc-His(Tos)-Merrifield Resin	LXSSBM09	100-200	0.3-0.6 0.6-0.8
Boc-Ile-Merrifield Resin	LXSSBM10	100-200	0.3-0.6 0.6-0.8
Boc-Leu-Merrifield Resin	LXSSBM11	100-200	0.3-0.6 0.6-0.8
Boc-Lys(2-Cl-Z)-Merrifield Resin	LXSSBM12	100-200	0.3-0.6 0.6-0.8
Boc-Met-Merrifield Resin	LXSSBM13	100-200	0.3-0.6 0.6-0.8
Boc-Phe-O-Merrifield Resin	LXSSBM14	100-200	0.3-0.6 0.6-0.8
Boc-Pro-Merrifield Resin	LXSSBM15	100-200	0.3-0.6 0.6-0.8
Boc-Ser(Bzl)-Merrifield Resin	LXSSBM16	100-200	0.3-0.6 0.6-0.8
Boc-Thr(Bzl)-Merrifield Resin	LXSSBM17	100-200	0.3-0.6 0.6-0.8
Boc-Trp-Merrifield Resin	LXSSBM18	100-200	0.3-0.6 0.6-0.8
Boc-Tyr(Bzl)-Merrifield Resin	LXSSBM19	100-200	0.3-0.6 0.6-0.8
Boc-Val-Merrifield Resin	LXSSBM20	100-200	0.3-0.6 0.6-0.8

### 2. Boc-AA-MBHA Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Boc-Ala-MBHA Resin	LXSSBB01	100-200	0.3-0.6 0.6-0.8
Boc-Arg(Tos)-MBHA Resin	LXSSBB02	100-200	0.3-0.6 0.6-0.8
Boc-Asn-MBHA Resin	LXSSBB03	100-200	0.3-0.6 0.6-0.8
Boc-Asp(OBzl)-MBHA Resin	LXSSBB04	100-200	0.3-0.6 0.6-0.8
Boc-Cys(Acm)-MBHA Resin	LXSSBB05	100-200	0.3-0.6 0.6-0.8
Boc-Gln-MBHA Resin	LXSSBB06	100-200	0.3-0.6 0.6-0.8
Boc-Glu(OBzl)-MBHA Resin	LXSSBB07	100-200	0.3-0.6 0.6-0.8
Boc-Gly-MBHA Resin	LXSSBB08	100-200	0.3-0.6 0.6-0.8
Boc-His(Tos)-MBHA Resin	LXSSBB09	100-200	0.3-0.6 0.6-0.8
Boc-Ile-MBHA Resin	LXSSBB10	100-200	0.3-0.6 0.6-0.8
Boc-Leu-MBHA Resin	LXSSBB11	100-200	0.3-0.6 0.6-0.8
Boc-Lys(2-Cl-Z)-MBHA Resin	LXSSBB12	100-200	0.3-0.6 0.6-0.8
Boc-Met-MBHA Resin	LXSSBB13	100-200	0.3-0.6 0.6-0.8
Boc-Phe-MBHA Resin	LXSSBB14	100-200	0.3-0.6 0.6-0.8
Boc-Pro-MBHA Resin	LXSSBB15	100-200	0.3-0.6 0.6-0.8
Boc-Ser(Bzl)-MBHA Resin	LXSSBB16	100-200	0.3-0.6 0.6-0.8
Boc-Thr(Bzl)-MBHA Resin	LXSSBB17	100-200	0.3-0.6 0.6-0.8
Boc-Trp-MBHA Resin	LXSSBB18	100-200	0.3-0.6 0.6-0.8
Boc-Tyr(Bzl)-MBHA Resin	LXSSBB19	100-200	0.3-0.6 0.6-0.8
Boc-Val-MBHA Resin	LXSSBB20	100-200	0.3-0.6 0.6-0.8

### 3. Boc-AA-PAM Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Boc-Ala-PAM Resin	LXSSBP01	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Arg(Tos)-PAM Resin	LXSSBP02	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asn-PAM Resin	LXSSBP03	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Asp(OBzl)-PAM Resin	LXSSBP04	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Cys(Acm)-PAM Resin	LXSSBP05	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Gln-PAM Resin	LXSSBP06	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Glu(OBzl)-PAM Resin	LXSSBP07	100-200 200-400	0.3-0.6 0.6-0.8
BBoc-Gly-PAM Resin	LXSSBP08	100-200 200-400	0.3-0.6 0.6-0.8
Boc-His(Tos)-PAM Resin	LXSSBP09	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ile-PAM Resin	LXSSBP10	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Leu-PAM Resin	LXSSBP11	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Lys(2-Cl-Z)-PAM Resin	LXSSBP12	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Met-PAM Resin	LXSSBP13	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Phe-PAM Resin	LXSSBP14	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Pro-PAM Resin	LXSSBP15	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Ser(Bzl)-PAM Resin	LXSSBP16	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Thr(Bzl)-PAM Resin	LXSSBP17	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Trp-PAM Resin	LXSSBP18	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Tyr(Bzl)-PAM Resin	LXSSBP19	100-200 200-400	0.3-0.6 0.6-0.8
Boc-Val-PAM Resin	LXSSBP20	100-200 200-400	0.3-0.6 0.6-0.8

H-AA-Merrifield resin, H-AA-MBHA resin, H-AA-PAM resin

### 4. Fmoc-AA-Wang Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Fmoc-Ala-Wang Resin	LXSSFW01	100-200	0.3-0.6 0.6-0.8
Fmoc-Arg(Pbf)-Wang Resin	LXSSFW02	100-200	0.3-0.6 0.6-0.8
Fmoc-Asn(Trt)-Wang Resin	LXSSFW03	100-200	0.3-0.6 0.6-0.8
Fmoc-Asp(OtBu)-Wang Resin	LXSSFW04	100-200	0.3-0.6 0.6-0.8
Fmoc-Cys(Trt)-Wang Resin	LXSSFW05	100-200	0.3-0.6 0.6-0.8
Fmoc-Gln(Trt)-Wang Resin	LXSSFW06	100-200	0.3-0.6 0.6-0.8
Fmoc-Glu(OtBu)-Wang Resin	LXSSFW07	100-200	0.3-0.6 0.6-0.8
Fmoc-Gly-Wang Resin	LXSSFW08	100-200	0.3-0.6 0.6-0.8
Fmoc-His(Trt)-Wang Resin	LXSSFW09	100-200	0.3-0.6 0.6-0.8
Fmoc-Ile-Wang Resin	LXSSFW10	100-200	0.3-0.6 0.6-0.8
Fmoc-Leu-Wang Resin	LXSSFW11	100-200	0.3-0.6 0.6-0.8
Fmoc-Lys(Boc)-Wang Resin	LXSSFW12	100-200	0.3-0.6 0.6-0.8
Fmoc-Met-Wang Resin	LXSSFW13	100-200	0.3-0.6 0.6-0.8
Fmoc-Phe-Wang Resin	LXSSFW14	100-200	0.3-0.6 0.6-0.8
Fmoc-Pro-Wang Resin	LXSSFW15	100-200	0.3-0.6 0.6-0.8
Fmoc-Ser(tBu)-Wang Resin	LXSSFW16	100-200	0.3-0.6 0.6-0.8
Fmoc-Thr(tBu)-Wang Resin	LXSSFW17	100-200	0.3-0.6 0.6-0.8
Fmoc-Trp-Wang Resin	LXSSFW18	100-200	0.3-0.6 0.6-0.8
Fmoc-Tyr(tBu)-Wang Resin	LXSSFW19	100-200	0.3-0.6 0.6-0.8
Fmoc-Val-Wang Resin	LXSSFW20	100-200	0.3-0.6 0.6-0.8

## 5. Fmoc-AA-Rink-MBHA Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Fmoc-Ala-Rink-MBHA Resin	LXSSFK01	100-200	0.3-0.6 0.6-0.8
Fmoc-Arg(Pbf)-Rink-MBHA Resin	LXSSFK02	100-200	0.3-0.6 0.6-0.8
Fmoc-Asn(Trt)-Rink-MBHA Resin	LXSSFK03	100-200	0.3-0.6 0.6-0.8
Fmoc-Asp(OtBu)-Rink-MBHA Resin	LXSSFK04	100-200	0.3-0.6 0.6-0.8
Fmoc-Cys(Trt)-Rink-MBHA Resin	LXSSFK05	100-200	0.3-0.6 0.6-0.8
Fmoc-Gln(Trt)-Rink-MBHA Resin	LXSSFK06	100-200	0.3-0.6 0.6-0.8
Fmoc-Glu(OtBu)-Rink-MBHA Resin	LXSSFK07	100-200	0.3-0.6 0.6-0.8
Fmoc-Gly-Rink-MBHA Resin	LXSSFK08	100-200	0.3-0.6 0.6-0.8
Fmoc-His(Trt)-Rink-MBHA Resin	LXSSFK09	100-200	0.3-0.6 0.6-0.8
Fmoc-Ile-Rink-MBHA Resin	LXSSFK10	100-200	0.3-0.6 0.6-0.8
Fmoc-Leu-Rink-MBHA Resin	LXSSFK11	100-200	0.3-0.6 0.6-0.8
Fmoc-Lys(Boc)-Rink-MBHA Resin	LXSSFK12	100-200	0.3-0.6 0.6-0.8
Fmoc-Met-Rink-MBHA Resin	LXSSFK13	100-200	0.3-0.6 0.6-0.8
Fmoc-Phe-Rink-MBHA Resin	LXSSFK14	100-200	0.3-0.6 0.6-0.8
Fmoc-Pro-Rink-MBHA Resin	LXSSFK15	100-200	0.3-0.6 0.6-0.8
Fmoc-Ser(tBu)-Rink-MBHA Resin	LXSSFK16	100-200	0.3-0.6 0.6-0.8
Fmoc-Thr(tBu)-Rink-MBHA Resin	LXSSFK17	100-200	0.3-0.6 0.6-0.8
Fmoc-Trp-Rink-MBHA Resin	LXSSFK18	100-200	0.3-0.6 0.6-0.8
Fmoc-Tyr(tBu)-Rink-MBHA Resin	LXSSFK19	100-200	0.3-0.6 0.6-0.8
Fmoc-Val-Rink-MBHA Resin	LXSSFK20	100-200	0.3-0.6 0.6-0.8

## 6. Fmoc-AA-Rink Amide Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Fmoc-Ala-Rink Amide Resin	LXSSFR01	100-200	0.3-0.6 0.6-0.8
Fmoc-Arg(Pbf)-Rink Amide Resin	LXSSFR02	100-200	0.3-0.6 0.6-0.8
Fmoc-Asn(Trt)-Rink Amide Resin	LXSSFR03	100-200	0.3-0.6 0.6-0.8
Fmoc-Asp(OtBu)-Rink Amide Resin	LXSSFR04	100-200	0.3-0.6 0.6-0.8
Fmoc-Cys(Trt)-Rink Amide Resin	LXSSFR05	100-200	0.3-0.6 0.6-0.8
Fmoc-Gln(Trt)-Rink Amide Resin	LXSSFR06	100-200	0.3-0.6 0.6-0.8
Fmoc-Glu(OtBu)-Rink Amide Resin	LXSSFR07	100-200	0.3-0.6 0.6-0.8
Fmoc-Gly-Rink Amide Resin	LXSSFR08	100-200	0.3-0.6 0.6-0.8
Fmoc-His(Trt)-Rink Amide Resin	LXSSFR09	100-200	0.3-0.6 0.6-0.8
Fmoc-Ile-Rink Amide Resin	LXSSFR10	100-200	0.3-0.6 0.6-0.8
Fmoc-Leu-Rink Amide Resin	LXSSFR11	100-200	0.3-0.6 0.6-0.8
Fmoc-Lys(Boc)-Rink Amide Resin	LXSSFR12	100-200	0.3-0.6 0.6-0.8
Fmoc-Met-Rink Amide Resin	LXSSFR13	100-200	0.3-0.6 0.6-0.8
Fmoc-Phe-Rink Amide Resin	LXSSFR14	100-200	0.3-0.6 0.6-0.8
Fmoc-Pro-Rink Amide Resin	LXSSFR15	100-200	0.3-0.6 0.6-0.8
Fmoc-Ser(tBu)-Rink Amide Resin	LXSSFR16	100-200	0.3-0.6 0.6-0.8
Fmoc-Thr(tBu)-Rink Amide Resin	LXSSFR17	100-200	0.3-0.6 0.6-0.8
Fmoc-Trp-Rink Amide Resin	LXSSFR18	100-200	0.3-0.6 0.6-0.8
Fmoc-Tyr(tBu)-Rink Amide Resin	LXSSFR19	100-200	0.3-0.6 0.6-0.8
Fmoc-Val-Rink Amide Resin	LXSSFR20	100-200	0.3-0.6 0.6-0.8

## 7. Fmoc-AA-Rink-AM Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
Fmoc-Ala-Rink-AM Resin	LXSSFA01	100-200	0.3-0.6 0.6-0.8
Fmoc-Arg(Pbf)-Rink-AM Resin	LXSSFA02	100-200	0.3-0.6 0.6-0.8
Fmoc-Asn(Trt)-Rink-AM Resin	LXSSFA03	100-200	0.3-0.6 0.6-0.8
Fmoc-Asp(OtBu)-Rink-AM Resin	LXSSFA04	100-200	0.3-0.6 0.6-0.8
Fmoc-Cys(Trt)-Rink-AM Resin	LXSSFA05	100-200	0.3-0.6 0.6-0.8
Fmoc-Gln(Trt)-Rink-AM Resin	LXSSFA06	100-200	0.3-0.6 0.6-0.8
Fmoc-Glu(OtBu)-Rink-AM Resin	LXSSFA07	100-200	0.3-0.6 0.6-0.8
Fmoc-Gly-Rink-AM Resin	LXSSFA08	100-200	0.3-0.6 0.6-0.8
Fmoc-His(Trt)-Rink-AM Resin	LXSSFA09	100-200	0.3-0.6 0.6-0.8
Fmoc-Ile-Rink-AM Resin	LXSSFA10	100-200	0.3-0.6 0.6-0.8
Fmoc-Leu-Rink-AM Resin	LXSSFA11	100-200	0.3-0.6 0.6-0.8
Fmoc-Lys(Boc)-Rink-AM Resin	LXSSFA12	100-200	0.3-0.6 0.6-0.8
Fmoc-Met-Rink-AM Resin	LXSSFA13	100-200	0.3-0.6 0.6-0.8
Fmoc-Phe-Rink-AM Resin	LXSSFA14	100-200	0.3-0.6 0.6-0.8
Fmoc-Pro-Rink-AM Resin	LXSSFA15	100-200	0.3-0.6 0.6-0.8
Fmoc-Ser(tBu)-Rink-AM Resin	LXSSFA16	100-200	0.3-0.6 0.6-0.8
Fmoc-Thr(tBu)-Rink-AM Resin	LXSSFA17	100-200	0.3-0.6 0.6-0.8
Fmoc-Trp-Rink-AM Resin	LXSSFA18	100-200	0.3-0.6 0.6-0.8
Fmoc-Tyr(tBu)-Rink-AM Resin	LXSSFA19	100-200	0.3-0.6 0.6-0.8
Fmoc-Val-Rink-AM Resin	LXSSFA20	100-200	0.3-0.6 0.6-0.8

H-AA-Wang resin, H-AA-Rink-MBHA resin, H-AA-Rink Amide resin, H-AA-Rink-AM resin

## 8. H-AA-CTC Resins

Product Name	Catalog No.	Particle size(mesh)	Loading (mmol/g resin)
H-Ala-CTC Resin	LXSSAC01	100-200	0.3-0.6 0.6-0.8
H-Arg(Pbf)-CTC Resin	LXSSAC02	100-200	0.3-0.6 0.6-0.8
H-Asn(Trt)-CTC Resin	LXSSAC03	100-200	0.3-0.6 0.6-0.8
H-Asp(OtBu)-CTC Resin	LXSSAC04	100-200	0.3-0.6 0.6-0.8
H-Cys(Trt)-CTC Resin	LXSSAC05	100-200	0.3-0.6 0.6-0.8
H-Gln(Trt)-CTC Resin	LXSSAC06	100-200	0.3-0.6 0.6-0.8
H-Glu(OtBu)-CTC Resin	LXSSAC07	100-200	0.3-0.6 0.6-0.8
H-Gly-CTC Resin	LXSSAC08	100-200	0.3-0.6 0.6-0.8
H-His(Trt)-CTC Resin	LXSSAC09	100-200	0.3-0.6 0.6-0.8
H-Ile-CTC Resin	LXSSAC10	100-200	0.3-0.6 0.6-0.8
H-Leu-CTC Resin	LXSSAC11	100-200	0.3-0.6 0.6-0.8
H-Lys(Boc)-CTC Resin	LXSSAC12	100-200	0.3-0.6 0.6-0.8
H-Met-CTC Resin	LXSSAC13	100-200	0.3-0.6 0.6-0.8
H-Phe-CTC Resin	LXSSAC14	100-200	0.3-0.6 0.6-0.8
H-Pro-CTC Resin	LXSSAC15	100-200	0.3-0.6 0.6-0.8
H-Ser(tBu)-CTC Resin	LXSSAC16	100-200	0.3-0.6 0.6-0.8
H-Thr(tBu)-CTC Resin	LXSSAC17	100-200	0.3-0.6 0.6-0.8
H-Trp-CTC Resin	LXSSAC18	100-200	0.3-0.6 0.6-0.8
H-Tyr(tBu)-CTC Resin	LXSSAC19	100-200	0.3-0.6 0.6-0.8
H-Val-CTC Resin	LXSSAC20	100-200	0.3-0.6 0.6-0.8

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