

SPPS Chemicals and Reagents

For The Highest Purity Peptides



Amino Acids Activators Resins Solvents

We Simplify Science

SPPS Chemicals

High quality chemicals, guaranteed.

CEM offers a complete suite of peptide synthesis reagents for optimized SPPS, whether using conventional synthesis or microwave irradiation. This includes a complete library of Fmoc amino acids, PEG and polystyrene resins, and the powerful Oxyma Pure activator. Using CEM's unique high-quality reagents provides the highest purity peptides, with CEM's innovative methodology and instrumentation.



Fmoc Amino Acids Excellent performance at an affordable price.

Overview

Using Fmoc amino acids of lower quality can have a significant impact on peptide purity and yield, resulting in hard to separate impurities and even total synthesis failures. CEM's Fmoc amino acids are the highest quality available on the market and provide the best purities and yields possible for peptide synthesis.

Standard Specifications

- HPLC purity \geq 99.0%
- Enantiomeric purity \geq 99.8%
- 100% fully synthetic amino acids
- Continuously used and tested in CEM's peptide synthesis laboratory



Pre-Weighed

Eliminate your weighing step by using amino acids that have been pre-weighed specifically for your Liberty system.



Full Library

A catalogue of Fmoc amino acids is available for synthesizing standard and modified peptides for use with any peptide synthesizer.

Synthesize peptides with superior reagent



Oxyma Pure The perfect activator for elevated temperature.

Overview

Oxyma Pure used with DIC produces peptides with increased yield and decreased epimerization, when used as an alternative to HOBt.¹ This safe, non-explosive auxiliary nucleophile works with carbodiimide coupling strategies to provide the best results for a peptide synthesis. Additionally, the use of DIC/Oxyma avoids side reactions associated with high levels of base (\geq 1 equiv. DIEA), using onium salt methods such as HBTU/DIEA.



Overview

Resin selection can make the difference between a successful synthesis and a failed synthesis, impacting not only purity but also yield. CEM ProTide resins are engineered to provide optimal swelling for the widest range of peptide and protein synthesis and maximum reagent and solvent efficiency. Choose from convenient pre-loaded resins or functionalized resins that can be loaded using straightforward methodology.



HO-TCP(CI)-ProTide



Based on a PEG-PS core with optimal swelling, ProTide is recommended for synthesis of long and difficult peptides.



Polystyrene Resins

High quality, pre-loaded, polystyrene resins are great for synthesis of standard and difficult peptides.



ProTide[™] Resins

Optimized PEG resin core with convenient preloadeding.



ProTide resins contain a PEG and polystyrene core with swelling properties optimized for peptide synthesis. ProTide resins are available preloaded with amino acid as a convenient option. For cysteine, preloaded chloro-trityl type resins are available to reduce unwanted side reactions. CEM also offers OH-(TCP)Cl resins, which can be prepared for loading any amino acids after a simple chlorination reaction. These resins provide strong performance for both standard peptide and protein synthesis.

Key Advantages:

- $\boldsymbol{\cdot}$ Conveniently preloaded resins for natural amino acids
- Flexible resin options for a variety of applications
- Automated, high temperature loading procedure that reduces reaction time from hours to just 10 minutes.





ProTide Preloaded Resins

CEM ProTide resins are available conveniently preloaded for all 20 natural amino acids. The combined PEG-PS composition provides ideal swelling for SPPS.



Rink Amide ProTide Resin

A powerful resin available in both low loading (0.15-0.25 mmol/g) and high loading (0.55 – 0.8 mmol/g). The PEG-PS core provides ideal swelling conditions for for peptides of any length.



HO-TCP(CI) ProTide Resin

This shelf stable chlorinated resin can be easily converted into the loading ready CI-TCP(CI) resin with a straightforward reaction. The Liberty line instrumentation has loading methods for CI-TCP(CI) that take only minutes.

Solvents A greener approach to peptide chemistry.



TamiSolve NxG:

TamiSolve NxG (n-butylpyrrolidinone) is an alternative solvent for use in SPPS. In addition to a less flammable profile than DMF or NMP, TamiSolve NxG is also not classified as a reproductive toxin. Access the same performance with a greener solvent profile. Incorporating TamiSolve on Liberty instrumentation is straightforward.

Synthesize peptides with superior reagents.

For our complete library of reagent offerings and to place your order, please visit the web pages below.

Fmoc Amino Acids High Quality and Affordable

Pre-weighed for CEM peptide synthesizers. Bulk Fmoc amino acids. Non-standard residues.



cem.com/fmoc-amino-acids

SPPS Resins

Reliable and Reproducible

High performance ProTide™ PEG-PS resins. Economical pre-loaded PS resins.



cem.com/resins

Oxyma Pure Better Purities and Safer

The best activator for elevated temperature SPPS.



cem.com/oxyma

TamiSolve Safer and Greener

A safer, more environmentally friendly solvent for solid phase peptide synthesis.



cem.com/tamisolve

cem.com/spps-chemicals





We Simplify Science

cem.com



United States (Headquarters): 800-726-3331 | info@cem.com For distributors and subsidiaries in other regions, visit cem.com/contact