

INITIATORS FOR ATOM TRANSFER RADICAL POLYMERIZATION (ATRP)

Functional Initiators

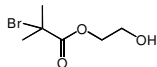
BUILDING POLYMERS FOR TOMORROW'S PRODUCTS
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Product Description

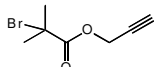
The ATRP process provides a simple route to many well-defined (co)polymers with precisely controlled functionalities, topologies, and compositions. It has been very successfully applied to the preparation of many nanocomposites, hybrids, and bioconjugates.

ATRP Solutions, Inc. provides several functional *initiators*, which will further extend the utility of ATRP and allow the synthesis of novel materials. We offer seven new initiators, which have not been commercially available before: 2-hydroxyethyl 2'-bromoisobutyrate (**HO-EBiB**), propargyl 2-bromoisobutyrate (**Prop-BiB**), bis(2-[2'-bromoisobutyryloxy] ethyl)disulfide (**BiBOEDS**) and di', tri', tetra' and hexafunctional initiators with bromoisobutyrate groups (**2f-BiB**, **3f-BiB**, **4f-BiB** and **6f-BiB**).

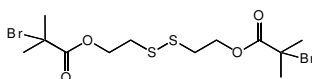
HO-EBiB



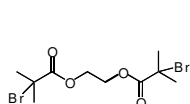
Prop-BiB



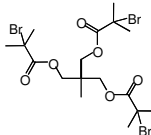
BiBOEDS



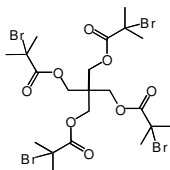
2f-BiB



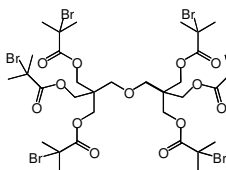
3f-BiB



4f-BiB

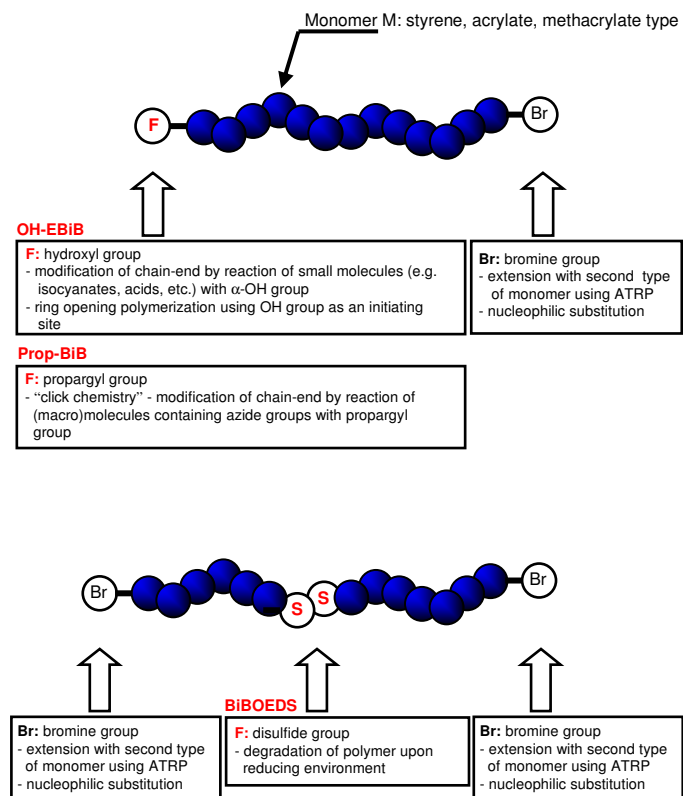


6f-BiB



Suggestions for Use:

All of the initiators may be used in the polymerization of styrene, acrylate and methacrylate type of monomers via ATRP. The initiators with functional groups (**HO-EBiB**, **Prop-BiB**, **BiBOEDS**) allow to modify the resulting polymer using various types of chemistries, yielding telechelic polymers. Initiators with 2, 3, 4 and 6 arms (**2f-BiB**, **3f-BiB**, **4f-BiB** and **6f-BiB**) allow to produce polymeric stars.



Helpful References

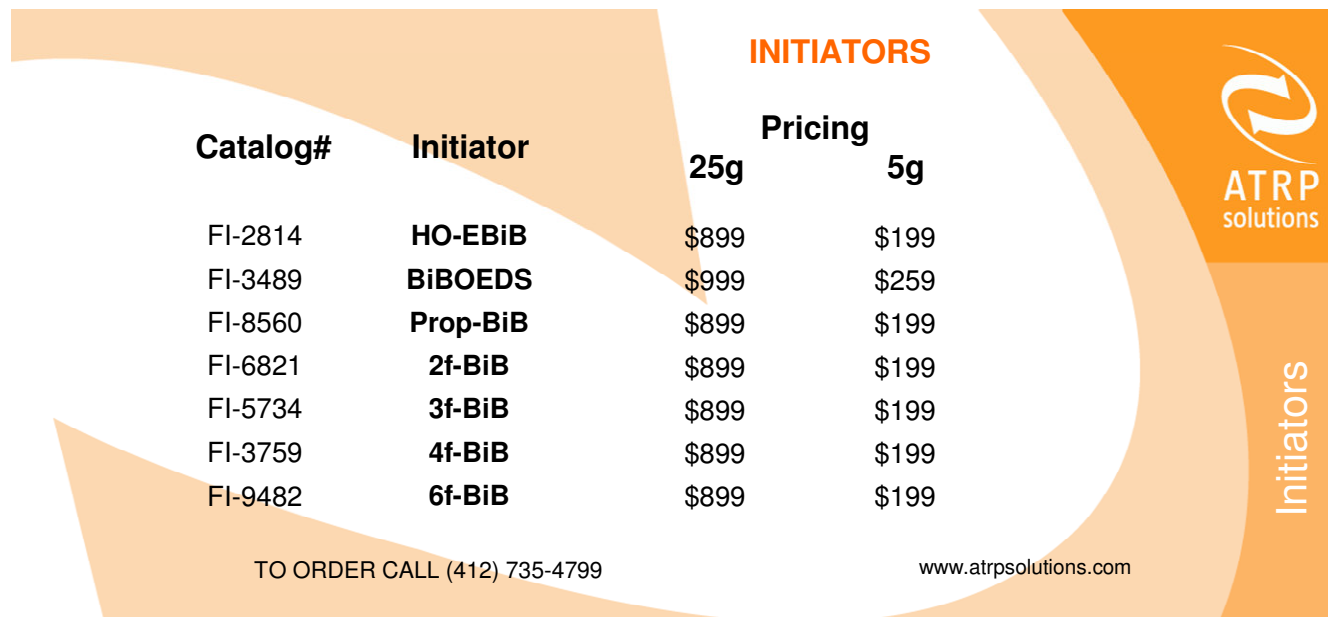
ATRP and functional polymers and initiators: a) Tsarevsky, N. V.; Matyjaszewski, K., *Chem. Rev.* **2007**, *107*, 2270;
b) Matyjaszewski, K.; Xia, J. *Chem. Rev.* **2001**, *101*, 2921;
c) Coessens, V.; Pintauer, T.; Matyjaszewski, K. *Prog. Polym. Sci.* **2001**, *26*, 337.

For Technical and Ordering Information

ATRP Solutions, Inc.
166 N. Dithridge St. Suite G4
Pittsburgh, PA 15213
Phone: (412) 735-4799
Email: information@atrp-solutions.com

Catalog#	Initiator	Pricing	
		25g	5g
FI-2814	HO-EBiB	\$899	\$199
FI-3489	BiBOEDS	\$999	\$259
FI-8560	Prop-BiB	\$899	\$199
FI-6821	2f-BiB	\$899	\$199
FI-5734	3f-BiB	\$899	\$199
FI-3759	4f-BiB	\$899	\$199
FI-9482	6f-BiB	\$899	\$199

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Sample Page from 2009 Spring Catalog

Other helpful references

Disulfide chemistry and ATRP: a) Tsarevsky, N. V.; Matyjaszewski, K. *Macromolecules* **2005**, *38*, 3087;
b) Tsarevsky, N. V.; Matyjaszewski, K. *Macromolecules* **2002**, *35*, 9009.

Ring opening polymerization and ATRP: Jakubowski, W.; Matyjaszewski, K., *Macromol. Symp.* **2006**, *240*, 213.

Click chemistry and ATRP: Tsarevsky, N. V.; Sumerlin, B. S.; Matyjaszewski, K. *Macromolecules* **2005**, *38*, 3558

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Catalog and Brochure for 2009 Spring are available online. Use 'Build Your Own Polymer' online service to order custom made polymer samples or just order ATRP initiators, macroinitiators or ligands.