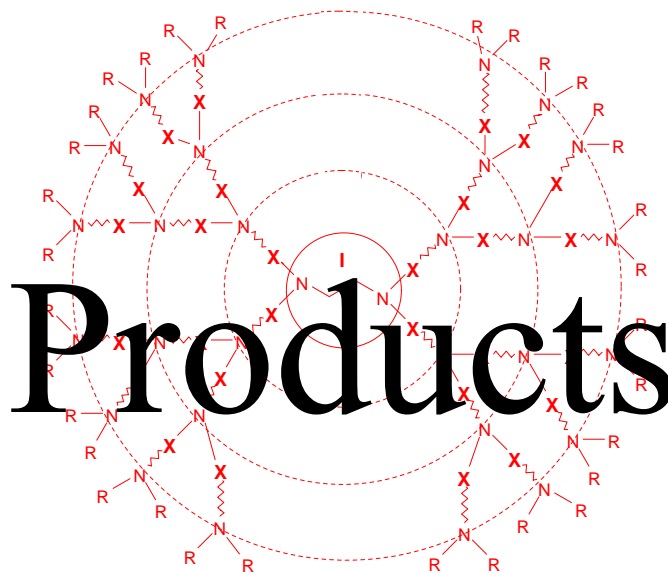
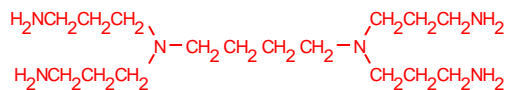


Aldrich Polymer Products



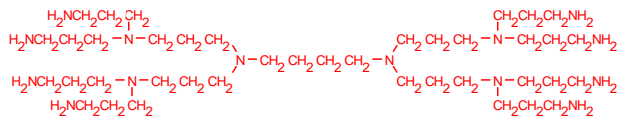
Dendritic Macromolecules¹

Dendrimers are being utilized as nanoscale catalysts,² nanoscopic reactors, micelle mimics, MRI agents, immunodiagnostic agents, gene delivery vectors, nanoantennae, and encapsulating agents.^{3,4}



46,069-9 DAB(PA)4, Polypropylenimine tetraamine Dendrimer, Generation 1.0 5mL; 25mL

NEW



46,072-9 DAB(PA)8, Polypropylenimine octaamine Dendrimer, Generation 2.0 5mL; 25mL

NEW

The dendrimers above are products of DSM Fine Chemicals.

41,244-9 Starburst™ (PAMAM) Dendrimer, Generation 4, 10 wt. % solution in methyl alcohol 2.5g; 10g

Contains 64 surface primary amino groups.

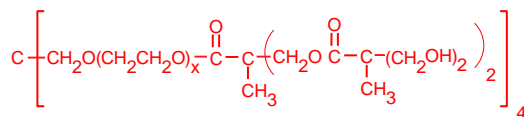
Ten different Starburst generations are available.

Gen.	Cat. No.	Gen.	Cat. No.	Gen.	Cat. No.
-0.5	41,234-1	1.0	41,238-4	2.5	41,241-4
0	41,236-8	1.5	41,239-2	3.0	41,242-2
0.5	41,237-6	2.0	41,240-6	3.5	41,243-0

Starburst is a trademark of Dendritech, Inc.

Hyperbranched macromolecules⁵ show unusually low viscosity-versus-MW profiles.⁶ Their formation kinetics⁷ and architectural control⁸ have been studied.

44,706-4 Hyperbranched polyol, Generation 2 25g



Generations 3 (44,707-2), 4 (44,708-0), and 5 (44,709-9) are also available.

New Latex Microparticle Standards

These particles are used for calibration and standardization of particle size instruments, light microscopes, electrophoretic controls, and electron microscopes, as well as in colloidal and light-scattering research. The particles, traceable to NIST standards, are sold as 2 wt. % aqueous dispersions containing sodium azide as a preservative.

Approximate diameters are given after each listing. Specific values to three decimal places (measured by TEM, SEM, and QELS) are supplied with each product. For more information on microparticle size standards, please see Aldrich Technical Bulletin AL-203.

- 46,169-5 Polystyrene**, uniform latex particles, 0.1 micron diameter **5mL**
- 46,170-9 Polystyrene**, uniform latex particles, 0.2 micron diameter **5mL**
- 46,171-7 Polystyrene**, uniform latex particles, 0.4 micron diameter **5mL**
- 46,172-5 Polystyrene**, uniform latex particles, 0.5 micron diameter **5mL**
- 46,173-3 Polystyrene**, uniform latex particles, 1.0 micron diameter **5mL**
- 46,494-5 Polyvinyltoluene**, uniform latex particles, 2.0 micron diameter **5mL**

References: (1) For a review, see: Tomalia, D.A. *Aldrichimica Acta* **1993**, 26, 91. (2) Sanders-Hovens, M.S.T.H. et al. *Polym. Mater. Sci. Eng.* **1995**, 73, 338. (3) Tomalia, D.A. et al. *ibid.* **1995**, 73, 75. (4) Jansen, J.F.G.A. et al. *ibid.* **1995**, 73, 123. (5) Fréchet, J.M.J. *Science* **1994**, 263, 1710. (6) Pettersson, B.; Sorenson, K. *Proceedings of the 21st Waterborne, Higher-Solids, and Powder Coatings Symposium*, Pt. 2, U. of S. Mississippi, **1994**, 753. (7) Malmstroem, E.; Hult, A. *Macromolecules* **1996**, 29, 1222. (8) Hawker, C.J.; Chu, F. *Polym. Mater. Sci. Eng.* **1995**, 73, 171.



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