

# Product Specification Sheet

## Hyacinth BMT™

Catalog Number: NC-0101  
 Product Name: 5-Benzylmercaptotetrazole  
 Molecular Formula: C<sub>8</sub>H<sub>8</sub>N<sub>4</sub>S  
 Molecular Weight: 192.2 g/mol  
 CAS Number and Name: 21871-47-6, 5-Benzyl-1*H*-thiotetrazole

Quality Assurance Data	Specification
<b>Appearance</b> in acetonitrile	Clear, no precipitation
<b>Colour Index</b> (APHA)	≤ 100
<b>Melting Point</b>	136 – 139°C
<b>Purity</b> by HPLC at 220 nm	≥ 99.0%
<b>Titration</b>	≥ 98.8%
<b>Water Content</b> (KF Coulometric)	≤ 500 ppm

### Application Note

Hyacinth BMT™ (5-Benzylmercapto-1*H*-tetrazole) is an activator for chemical synthesis of RNA and DNA and can be used as a simple substitute for 1*H*-Tetrazole, DCI and ETT in all protocols. In case of RNA synthesis it is compatible with both TBDMS and TOM protected monomers. It improves RNA coupling yields to 99%, requires only 3 minute coupling times, requires 50% less phosphoramidite for each coupling and is easy to handle due to low hygroscopicity

**Shipping:** Ambient

**Storage:** Store the solutions at room temperature (>15°C) to avoid crystallization

**For safety instructions see GHS label! The use of this product is strictly limited to trained personnel for professional manufacturing, laboratory, or research purposes. Final Fitness-For-Use must be determined by and is the sole responsibility of the end-user.**