

Specification

**BES for buffer solutions**

**A1062**

<b>Physical Description:</b>	Solid
<b>Product Code:</b>	A1062
<b>Product Name:</b>	BES for buffer solutions
<b>Specifications:</b>	<p>Assay (titr.): min. 99 %</p> <p>pH (1 %; H<sub>2</sub>O): 4.1 - 4.5</p> <p>Heavy metals (as Pb): max. 0.0005 %</p> <p>Water: max. 1 %</p> <p>A (1 cm/10 % in H<sub>2</sub>O)</p> <p>280 nm: max. 0.03</p> <p>260 nm: max. 0.05</p>
<b>WGK:</b>	1
<b>Storage:</b>	RT
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>15</sub> NO <sub>5</sub> S
<b>M:</b>	213.26 g/mol
<b>CAS:</b>	10191-18-1
<b>EINECS:</b>	233-465-5
<b>CS:</b>	29221900
<b>Comment</b>	<p>Reference (4) describes a simple calcium phosphate transfection protocol that achieves highly efficient transformation of mammalian cells with a BES-buffered salt solution (50 mM BES, pH 6.95; 280 mM NaCl; 1.5 mM Na<sub>2</sub>HPO<sub>4</sub>). This buffer substitutes for the commonly used Hepes-buffered saline. One of the crucial factors for obtaining efficient transformation is the pH (6.95) of the buffer.</p>
<b>Bibliography</b>	<p>(1)Good, N.E. <i>et al.</i> (1966) <i>Biochemistry</i> <b>5</b>, 467-477Hydrogen ion buffers for biological research. (2)Good, N.E. &amp; Izawa, S. (1972) <i>Methods Enzymol.</i> <b>24</b>, 53-68Hydrogen ion buffers. (3)Ferguson, W.J. <i>et al.</i> (1980) <i>Anal. Biochem.</i> <b>104</b>, 300-310Hydrogen ion buffers for biological research. (4)Chen, C. &amp; Okayama, H. (1987) <i>Mol. Cell. Biol.</i> <b>7</b>, 2745-2752High-efficiency transformation of mammalian cells by plasmid DNA.</p>

**AppliChem GmbH**

Ottoweg 4 • D-64291 Darmstadt • Phone +49 6151 9357 0 • Fax +49 6151 9357 11 • [info.de@itwreagents.com](mailto:info.de@itwreagents.com) • [www.itwreagents.com](http://www.itwreagents.com)  
 CEO Joan Roget • Commerzbank Darmstadt • Bank 508 800 50 • Account 0186989900 IBAN DE24 5088 0050 0186 9899 00 • Swiftcode DRESDEFF508 • Finanzamt Darmstadt 07 228 16476 • Register court Darmstadt HRB Nr. 7340