

## Specification

### Tris for buffer solutions

**A1379**

<b>Solubility:</b>	800 g/L (H <sub>2</sub> O)
<b>Physical Description:</b>	Solid
<b>Product Code:</b>	A1379
<b>Product Name:</b>	Tris for buffer solutions
<b>Specifications:</b>	<p>Assay (titr.): min. 99.3 %</p> <p>pH (1 M; H<sub>2</sub>O; 20°C): 10.5 - 12.0</p> <p>Heavy metals (as Pb): max. 0.001 %</p> <p>Water: max. 0.5 %</p>
<b>WGK:</b>	1
<b>Storage:</b>	RT
<b>Molecular Formula:</b>	C <sub>4</sub> H <sub>11</sub> NO <sub>3</sub>
<b>M:</b>	121.14 g/mol
<b>CAS:</b>	77-86-1
<b>EINECS:</b>	201-064-4
<b>CS:</b>	29221900
<b>Comment</b>	<p>Tris is the most commonly used buffer in biological research. One of the most important applications is the use as electrophoresis buffer such as TBE (see A1417 and A0972) or TAE (see A1416 and A1691) for polyacrylamide and agarose gel electrophoresis, respectively. Tris should not be used at pH values below pH 7.2 or above pH 9.0. The pH value of a Tris buffer strongly depends on the temperature. Therefore, Tris buffers should be prepared at the temperature where it is used. Besides, dilution of concentrated Tris buffers will result in a decrease in the pH value of 0.1 pH units per tenfold dilution. Please take into account when preparing RNase-free reagents by DEPC-treatment that Tris will inactivate DEPC. In addition, Tris may form Schiff bases with aldehydes and ketones.</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)Ogden, R.C. &amp; Adams, D.A. (1987) <i>Methods Enzymol.</i> <b>152</b>, 61-87Electrophoresis in agarose and acrylamide gels.</p>

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