

Specification

**Brij® 58 BioChemica**

**A1669**

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|------------------------------|---|
| <b>Physical Description:</b> | Solid   |
| <b>Product Code:</b>         | A1669   |
| <b>Product Name:</b>         | Brij® 58 BioChemica   |
| <b>Headline Comment:</b>     | ® registered trademark of Atlas Chemical Co.  |
| <b>Specifications:</b>       | Water (K.F.): max. 3 %  |
| <b>WGK:</b>                  | 2   |
| <b>Storage:</b>              | RT  |
| <b>Molecular Formula:</b>    | C <sub>56</sub> H <sub>114</sub> O <sub>21</sub>  |
| <b>M:</b>                    | 1123.51 g/mol   |
| <b>CAS:</b>                  | 9004-95-9   |
| <b>CS:</b>                   | 34021300  |
| <b>Comment</b>               | <p>Brij® 58 is a non-ionic detergent. Incubation of living cells with this detergent produces the so-called cytoskeleton. Proteins leak from the cells after a lag phase, depending on the detergent concentration, time of exposure and cell type (1). During this lag phase, lasting for 30 minutes in erythrocytes, the cytoplasm of the cells stays "intact" in the presence of the permeabilized membrane (3). Enzyme activity may be determined in the presence of Brij® 58. Up to a concentration of 0.5 %, the activity of protein kinase C from membrane fractions can be determined (2), the H<sup>+</sup>-ATPase from plant membranes is activated at a concentration of 0.05 % Brij® 58 (4-6). A stock solution of Brij® 58 is prepared by dissolving e.g. 50 mg/1 ml in hot water. The solution won't become clear.</p>  |
| <b>Bibliography</b>          | <p>(1)Ridsdale, J.A. &amp; Clegg, J.S. (1991) <i>J. Cell. Physiol.</i> <b>147</b>, 242-247Evidence for cooperativity of protein dissolution in Brij® 58 permeabilized L929 cells. (2)Rush, J.S. <i>et al.</i> (1992) <i>Anal. Biochem.</i> <b>207</b>, 304-310Direct assay of membrane associated protein kinase C activity in B Lymphocytes in the presence of Brij® 58. (3)Kellermayer, M. <i>et al.</i> (1994) <i>J. Cell. Physiol.</i> <b>159</b>, 197-204Release of potassium, lipids and proteins from nonionic detergent treated chicken red blood cells. (4)Ibarz, E. <i>et al.</i> (1994) <i>Biochim. Biophys. Acta</i> <b>1196</b>, 93-96Activation of plant plasma membrane H<sup>+</sup>-ATPase by the non-ionic detergent Brij® 58. (5)Macrì, F. <i>et al.</i> (1994) <i>Biochim. Biophys. Acta</i> <b>1215</b>, 109-114Lipoxygenase activity associated with isolated soybean plasma membranes. (6)Córdoba, M.C. <i>et al.</i> (1995) <i>Biochem. Biophys. Res. Com.</i> <b>216</b>, 1054-1059Topography of the electron transport proteins from <i>Allium cepa</i> plasma membranes.</p> |
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