


Specification

**Guanidine Thiocyanate for molecular biology**

**A1107**

<b>Solubility:</b>	1420 g/L (H <sub>2</sub> O)
<b>Physical Description:</b>	Solid
<b>Product Code:</b>	A1107
<b>Product Name:</b>	Guanidine Thiocyanate for molecular biology
<b>Specifications:</b>	DNases/RNases/Proteases: not detectable Assay (titr.): min. 99 % pH (1 M): 4.7 - 7.0 Water (K.F.): max. 1.0 % Ammonium: max. 0.1 % Fe: max. 0.0005 % A (1 cm/6 M in water HPLC grade) 280 nm: max. 0.6 300 nm: max. 0.1
<b>Hazard pictograms</b>	
<b>WGK:</b>	2
<b>Storage:</b>	RT
<b>Signal Word:</b>	Attention
<b>GHS Symbols:</b>	GHS07
<b>H Phrases:</b>	EUH032 H302+H312+H332 H412
<b>P Phrases:</b>	P273

**AppliChem GmbH**

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## Specification

### Guanidine Thiocyanate for molecular biology

**A1107**

	P302+P352
<b>Molecular Formula:</b>	CH <sub>6</sub> N <sub>3</sub> SCN
<b>M:</b>	118.16 g/mol
<b>CAS:</b>	593-84-0
<b>EINECS:</b>	209-812-1
<b>CS:</b>	29252900
<b>Index Nr.:</b>	615-004-00-3
<b>Comment</b>  Reference (1) describes the original protocol for the guanidine thiocyanate (GuaSCN) / β-mercaptoethanol methode for the isolation of non-degraded RNA from RNase-rich tissues (e. g. pancreas). There are many variations from this method published (e. g. ref. 3, 4).As an <b>alternative</b> to the toxic formaldehyde, guanidine thiocyanate may be applied for Northern blotting (5). A final concentration of 20 mM is sufficient to denature RNA in the agarose gel (5).	
<b>Bibliography</b>  (1)Chirgwin, J.M. <i>et al.</i> (1979) <i>Biochemistry</i> <b>18</b> , 5294-5299227Isolation of biologically active ribonucleic acid from sources enriched in ribonuclease. (2)MacDonald, R.J. <i>et al.</i> (1987) <i>Methods Enzymol.</i> <b>152</b> , 219-227Isolation of RNA using guanidinium salts. (3)Lizardi, P.M. (1983) <i>Methods Enzymol.</i> <b>96</b> , 24-38Methods of the preparation of messenger RNA. (4)Chomczynski, P. & Sacchi, N. (1987) <i>Anal. Biochem.</i> <b>162</b> , 156-159Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction. (5)Goda, S.K. & Minton, N.P. (1995) <i>Nucleic Acids. Res.</i> <b>23</b> , 3357-3358A simple procedure for gel electrophoresis and Northern blotting of RNA.	

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