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BioChemica | Chemica Synthesis Services  
an ITW company

# Specification

## Xylene cyanol FF (C.I. 42135) BioChemica

**A1408**

<b>Synonym</b>	Cyanol FF
<b>Formula</b>	C <sub>25</sub> H <sub>27</sub> N <sub>2</sub> NaO <sub>6</sub> S <sub>2</sub>
<b>M</b>	538.61 g/mol
<b>CAS-No.:</b>	4463-44-9
<b>HS-No.:</b>	32041900
<b>EC-No.:</b>	224-728-5
<b>Storage:</b>	RT
<b>LGK:</b>	10 - 13
<b>R:</b>	36
<b>S:</b>	24
	irritant
<b>WGK:</b>	1
<b>Specification</b>	
<b>λ<sub>max.</sub> (H<sub>2</sub>O)</b>	613 - 616 nm
<b>Loss on drying (110°C)</b>	max. 6 %

## Literature

- (1) Maxam, A.M. & Gilbert, W. (1977) *Proc. Natl. Acad. Sci. USA* **74**, 560-564 A new method for sequencing DNA.
- (2) Ogden, R.C. & Adams, D.A. (1987) *Methods Enzymol.* **152**, 61-87 Electrophoresis in agarose and acrylamide gels.
- (3) Sambrook, J., Fritsch, E.F. & Maniatis, T. (1989) *Molecular Cloning: A Laboratory Manual*, 2nd Edition, page 6.12. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.
- (4) Ausubel, F.A., Brent, R., Kingston, R.E., Moore, D.D., Seidman, J.G., Smith, J.A. & Struhl, K. (eds.) 2000. *Current Protocols in Molecular Biology*. Page 7.6.5 Suppl. 16 John Wiley & Sons, New York.

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## Comment

Bromophenol blue (BPB) and xylene cyanol FF (XC) are the most widely used stains in gel electrophoresis for tracing the migration of samples on electrophoretic gels. Usually, both stains are added to the sample buffers (loading buffers; see our *ready-to-use loading buffers*) at concentrations of 0.05 % to 0.25 %.

In **denaturing** gels, the dye migrates with sizes like the following oligonucleotide:

**Polyacrylamide (%) Bromophenol blue Xylene cyanol** (according to ref. 1, 4)

- 5 35 bases 130 bases
- 6 26 bases 106 bases
- 8 19 bases 75 bases
- 10 12 bases 55 bases
- 20 10 bases 28 bases