



UNIVERSITY OF LEEDS

This is a repository copy of *At least four distinct blue cationic phthalocyanine dyes sold as "alcian blue" raises the question: what is alcian blue?*

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/182755/>

Version: Supplemental Material

---

**Article:**

Ali, S, Dapson, RW, Horobin, RW et al. (2 more authors) (2022) At least four distinct blue cationic phthalocyanine dyes sold as "alcian blue" raises the question: what is alcian blue? *Biotechnic and Histochemistry*, 97 (1). pp. 11-20. ISSN 1052-0295

<https://doi.org/10.1080/10520295.2021.2018497>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

**Table 2.** Outcomes of the BSC precipitation test, TLC and UV/Vis spectroscopy for alcian blue lots investigated.

Lot code	BSC alcian blue category, based on the precipitation test	TLC R <sub>f</sub> On silica, using a developing system of butanol-acetone-water-aq. NH <sub>3</sub> (5:5:1:2 by volume)	UV/Vis	
			$\lambda_{\text{max}}$ of 600–630 nm peak	Is c 250 nm peak higher than c 350 nm peak?
L1	Alcian blue 8G or equivalent	0.00	611	Y
L2	Alcian blue 8G or equivalent	0.00	601	Y
L3	Alcian blue 8G or equivalent	0.00	602	Y
L4	Alcian blue 8G or equivalent	0.00	611	Y
L5	Alcian blue 8G or equivalent	0.00	603	Y
L6	Alcian blue 8G or equivalent	0.00	605	Y
L7	Alcian blue variant	0.25	608	N
L8	Alcian blue 8G or equivalent (dye precipitates, some redissolves)	0.00	606	N
L9	Alcian blue variant	0.22	627	N
L10	Alcian blue variant	0.25	607	N
L11	Alcian blue variant	0.27	609	N