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# Quetol 651 Embedding Kit

## TECHNICAL DATA SHEET 297

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Quetol 651 is an epoxy resin of low viscosity of 15 cps at 25° C. Upon polymerization it yields a light-colored, solid block with excellent cutting qualities. Quetol 651 is miscible with water, alcohol, acetone and 2,3-Epoxypropyl butyl ether.

### KIT CONTAINS

- Quetol 651 (ethylene glycol diglycidyl ether) 100 ml
- NSA 250 ml
- DMP 30 ml

The following mixture has been found suitable for embedding<sup>2</sup>:

- Quetol 651 (ethylene glycol diglycidyl ether) 33 ml
- NSA 67 ml
- DMP-30 1.5-2.0 ml

This mixture penetrates readily and completely into the specimen. Polymerization is finished in about 24 hours at 60° C. it is reported that results are not much different from those obtained with Epon 812.<sup>3,4</sup>

The general embedding method and the rapid method<sup>5</sup> recommend employing 2,3-Epoxypropyl butyl ether (n-BGE) as an auxiliary to infiltration.<sup>6</sup> n-BGE is used like propylene oxide in the processing procedure. After fixation and dehydration as usual, the general method is as follows:

- Dehydrating agent / n-BGE (1:1) 15-30 minutes
- n-BGE 15-30 minutes
- n-BGE / Quetol 651 mixture (1:1) 1 hour
- Quetol mixture 1-2 hours
- Quetol mixture 1-2 hours

Embedded in BEEM\* capsules, and cure in the oven at 60° for 24 hours.

Quetol 651 cast in flat open molds results in soft blocks.

### CAUTION

The toxicological properties of Quetol 651 are not fully known. Prolonged and repeated contact of liquid or breathing of vapors or mists may cause delayed and serious injury. Do not get on skin, in eyes or on clothing. Avoid inhalation of vapors or mists. In case of contact with eyes or skin, immediately flush with plenty of water for at least 15 minutes. For eyes, seek medical attention. Remove contaminated clothing and shoes at once. Wash them thoroughly before re-use. Use only with adequate ventilation. Wear impervious gloves and safety glasses. Wash immediately after handling.

### REFERENCES

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\*BEEM is a registered Trademark of Better Equipment for Electron Microscopy, Inc.

### ORDERING INFORMATION

Cat. #	Description	Size
16908	Quetol 651 Embedding Kit	1 Kit
05678	2,3-Epoxypropyl butyl ether	500g

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### TO ORDER

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