



Keywords: Mull, Nujol, Fluorolube

Mulling Agents

Specac supply two types of mulling agents, Nujol and Fluorolube, that are used with ground solid samples to be runs as liquid mulls.

Nujol is essentially a liquid paraffin based solution and when used for mulling, strong carbon to hydrogen bond absorptions are exhibited in the infrared spectrum. The carbon to hydrogen bond absorptions that may be present in the sample itself are masked by those from the Nujol mulling agent.

Fluorolube is essentially a fluorocarbon based solution and exhibits strong carbon to fluorine bond absorptions from 1300cm^{-1} onwards to 400cm^{-1} in the Mid IR spectrum. The useful range for observation of a sample in a Mid IR spectrum when using Fluorolube as the mulling agent is 4000cm^{-1} to 1300cm^{-1} .

Therefore, if possible it is preferable to run a sample as both a Nujol mull and a Fluorolube mull. This allows for all of the spectral features of the sample to be seen in an infrared spectrum, because the regions masked by each specific mulling agent are unaffected in the other spectrum.

P/N GS03620 Bottle of Nujol - 25mls.

P/N GS03621 Bottle of Fluorolube - 25mls.