METHOD SUMMARY

One indication of the purity of acrylonitrile is how strong the absorbance is in the range of 200 to 320 nm. The point at which the absorbance increases to greater than 1 is the UV cut-off point.

SAFETY

Acrylonitrile is hazardous to the health and dangerous to handle. Use acrylonitrile in a well ventilated hood. Review the MSDS for detailed information concerning toxicity, first aid procedures and safety precautions.

Refer to the appropriate safety section or site manual for the necessary protective equipment to use when handling any reagents or samples.

INTERFERENCES

There are no known interferences to this method.

APPARATUS AND REAGENTS

Spectrophotometer, UV-Visible, Hitachi U-2000 or equivalent.
Cells, 10 mm, Quartz or UV transparent

CALIBRATION

Refer to Calibration Method CAL-1 and/or the instrument manual for wavelength and absorbance scale calibration procedures.

PROCEDURE

Scan the sample from 320 to 200 nm.
Record the wavelength when 1.0 absorbance unit is reached on recorded scan.

REPORT

Report the wavelength to the nearest whole unit (nm).