COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Copper(I) oxide; Cu_2O; [1317-39-1] (2) Bromine; Br_2; [7726-95-6] (3) Acetonitrile; C_2H_3N; [75-05-8] (4) Methyl acetate; $C_3H_6O_2$; [79-20-9]	Busheina, I. S.; Headridge, J. B. *Analyst* 1981, *106*, 221-6.
VARIABLES: Method of determining the solubility at 25°C.	**PREPARED BY:** T. P. Dirkse

EXPERIMENTAL VALUES:

Solubility of Cu_2O in organic solvent-bromine mixtures at 25°C.

	acetonitrile-bromine		methyl acetate-bromine	
	refluxing	no refluxing	refluxing	no refluxing
C_{Cu}/g per 100 ml	0.32	0.13	0.18	0.09
C_{Cu}/mol dm^{-3} [a]	0.050	0.020	0.028	0.014

[a] The mol dm^{-3} values were calculated by the compiler

The purpose of this study was to determine the feasibility of using organic solvent-bromine mixtures for removing various kinds of inclusions from metals.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The solvents consisted of 10 vol of organic material plus one vol of Br_2. Two methods were used; (a) With refluxing. 300 mg samples of Cu_2O were added to 30 ml of solvent. If no reaction was observed the mixture was heated under reflux for 30 min and then allowed to cool (1). (b) Without reflux. Successive portions of solid samples were added to the solvent until all noticeable reaction stopped. The mixture was then shaken mechanically for 15 min and placed in a thermostat at 25°C overnight. The phases were separated by filtration through a Whatman Glass microfiber paper, Type GF/F. A sample of filtrate was evaporated to dryness, the residue was dissolved in acid and the mixture amalyzed by atomic absorption spectrophotometry.

SOURCE AND PURITY OF MATERIALS:

All materials were of reagent grade quality. The solvent components were given an additional purification procedure.

ESTIMATED ERROR:

No details are given.

REFERENCES:

1. Busheina, I. S.; Headridge, J. B. *Analyst* 1980, *105*, 600.