COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Lutetium bromide; $LuBr_3$; [14456-53-2] (2) Tetrahydrofuran; C_4H_8O; [109-99-9]	Rossmanith, K. *Monatsh. Chem.* 1966, 97, 1357-64.
VARIABLES: Room Temperature: T/K = 294-296	**PREPARED BY:** T. Mioduski

EXPERIMENTAL VALUES:

The solubility of $LuBr_3$ in tetrahydrofuran at 21-23°C was reported to be

0.30 g per 100 ml of solution

or

7.2×10^{-3} mol dm^{-3} (compiler)

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Isothermal method employed. The solution was equilibrated in an extractor with agitation for 60-80 hours at room temperature.

Lutetium was determined by the oxalate method and by titration with EDTA using Xylenol Orange indicator. The solvent was determined by difference.

Anhydrous materials were handled in a dry box through which was passed a stream of nitrogen free of carbon dioxide.

The solid phase is $LuBr_3.3C_4H_8O$.

SOURCE AND PURITY OF MATERIALS:

Sources and purities of initial materials not specified. $LuBr_3$ was prepared by conversion of the oxide by high temperature reaction with an excess of NH_4Br followed by heating the product in a stream of dry nitrogen, and then in vacuum to remove unreacted NH_4Br.

Tetrahydrofuran was distilled from $LiAlH_4$.

ESTIMATED ERROR:

Nothing specified.

REFERENCES: