

COMPONENTS: (1) Yttrium bromide; YBr_3 ; [13469-98-2] (2) 1,2-Diethoxyethane; $\text{C}_6\text{H}_{14}\text{O}_2$; [629-14-1]	ORIGINAL MEASUREMENTS: Kirmse, E. M. <i>Tr. II Vses. Konf. po Teor. Rastvorov</i> <u>1971</u> , 200-6.
VARIABLES: One temperature: $T/K = 298$	PREPARED BY: T. Mioduski
EXPERIMENTAL VALUES: The solubility of YBr_3 in $\text{C}_2\text{H}_5\text{OCH}_2\text{CH}_2\text{OC}_2\text{H}_5$ at 25°C was reported to be $1.2 \text{ mass } \%$ The corresponding molality calculated by the compiler is $0.037 \text{ mol kg}^{-1}$	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: Nothing specified. On the basis of previous papers by the author, it seems that reaction mixtures were thermostated for several days, and that γ was determined by complexometric titration in the presence of xylenol orange indicator.	SOURCE AND PURITY OF MATERIALS: Nothing specified. Presumably the anhydrous bromide was prepared by the method of Taylor and Carter (1). ESTIMATED ERROR: Nothing specified. REFERENCES: 1. Taylor, M. D.; Carter, C. P. <i>J. Inorg. Nucl. Chem.</i> <u>1962</u> , 24, 387.

COMPONENTS: (1) Yttrium bromide; YBr_3 ; [13469-98-2] (2) Tetrahydrofuran; $\text{C}_4\text{H}_8\text{O}$; [109-99-9]	ORIGINAL MEASUREMENTS: Rossmannith, K. <i>Monatsh. Chem.</i> <u>1966</u> , 97, 1357-64.
VARIABLES: Room temperature: T/K about 294-296	PREPARED BY: T. Mioduski
EXPERIMENTAL VALUES: <p>The solubility of YBr_3 in tetrahydrofuran at 21-23°C was reported to be 0.16 g/100 ml solution</p> <p>The solid phase is $\text{YBr}_3 \cdot 3.5\text{C}_4\text{H}_8\text{O}$.</p>	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: Isothermal method employed. The solution was equilibrated in an extractor for 60-80 hours at room temperature. Yttrium was determined by the oxalate method and by titration with EDTA using Xylenol Orange indicator. For the solid phase analysis, the solvent was determined by difference. Anhydrous substances were handled in a dry box through which was passed a current of dry and CO_2 -free nitrogen.	SOURCE AND PURITY OF MATERIALS: Sources and purities not specified. YBr_3 prepared by reaction of the oxide at high temperatures with an excess of NH_4Br followed by heating the product in a current of dry nitrogen, and then in vacuum to remove unreacted NH_4Br . Tetrahydrofuran was distilled from LiAlH_4 .
	ESTIMATED ERROR: Nothing specified.
	REFERENCES:

COMPONENTS: (1) Yttrium bromide; YBr_3 ; [13469-98-2] (2) 1,4-Dioxane (p-dioxane); $\text{C}_4\text{H}_8\text{O}_2$; [123-91-1]	ORIGINAL MEASUREMENTS: Kirmse, E. M.; Zwietasch, K. J.; Tirschmann, J.; Oelsner, L.; Niedergessaess, U. <i>Z. Chem.</i> <u>1968</u> , <u>8</u> , 472-3 Kirmse, E. M. <i>Tr. II Vses. Konf. po Teor. Rastvorov</i> <u>1971</u> , 200-6.
VARIABLES: One temperature: $T/K = 298$	PREPARED BY: T. Mioduski
EXPERIMENTAL VALUES: The solubility of YBr_3 in 1,4-dioxane at 25°C was reported to be <div style="text-align: center;">1.6 mass %</div> The corresponding molality calculated by the compiler is <div style="text-align: center;">$0.049 \text{ mol kg}^{-1}$</div>	
AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE: The solute-solvent mixtures were isothermally agitated at 25°C or/and at room temperature (the difference found in the solubility was within the limits of experimental error). Y was determined by complexometric titration. No other information given.	SOURCE AND PURITY OF MATERIALS: The anhydrous bromide was obtained by the method of Taylor and Carter (1). No other details given. ESTIMATED ERROR: Nothing specified. REFERENCES: 1. Taylor, M. D.; Carter, C. P. <i>J. Inorg. Nucl. Chem.</i> <u>1962</u> , <u>24</u> , 387.