COMPONENTS:	EVALUATOR:
(1) 2,4,6-Tribromophenol; $C_6H_3Br_3O$; [118-79-6]	A. Vesala, Department of Chemistry and Biochemistry, University of Turku.
(2) Water; H_2O; [7732-18-5]	November 1979.

CRITICAL EVALUATION:

The only two available published works concerning the solubility of 2,4,6-tribromophenol in water are old and information provided in these works concerning the methods of analysis is incomplete. Also, the purity of the reagents used in the measurements is open to question. However, the solubility value of 70 mg(1)/kg(2) at 288 K determined by Werner (1) in 1884 agrees quite well with the value of 76 mg(1)/kg(2) at 17-18°C measured by Ogston (2). (These concentrations have been established in the same units by assuming the density of the saturated solution to be 1.0 g/cm^3.)

It should be noted that the solubility of 2,4,6-tribromophenol in water is considerably dependent upon the acidity of the solution. Here, it is assumed that the solubility established refers to that of a solution having a pH value prevailing for saturated 2,4,6-tribromophenol in water.

The solubility of 2,4,6-tribromophenol in water is reported here as a doubtful value:

T/K	10^4mol(1)/dm^3	10^2g(1)/kg	10^6x(1)
283.15	2.1	7.0	3.8

REFERENCES

1. Werner, E. *Ann. Chim. Phys. Ser. G* 1884, 572-3.

2. Ogston, A. G. *J. Chem. Soc.* 1936, *Part II*, 1713.

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 2,4,6-Tribromophenol; $C_6H_3Br_3O$; [118-79-6] (2) Water; H_2O; [7732-18-5]	Werner, E. *Ann. Chim. Phys. Ser. G* 1884, 572-3.
VARIABLES:	PREPARED BY:
One temperature	A. Vesala

EXPERIMENTAL VALUES:

t/°C	10^2g(1)/dm^3 a	10^4mol(1)/dm^3 b	$10^6 x$(1) b
15	7	2.1	3.8

a. Reported.
b. Calculated by F. W. Getzen.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
Information concerning the equilibration procedure was incomplete. The analysis was done by titration of the saturated solutions with a standard barium hydroxide solution.	$C_6H_3Br_3O$: Synthesized product, reported melting point 92°C. H_2O: Source and purity not specified.
	ESTIMATED ERROR:
	REFERENCES:

COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) 2,4,6-Tribromophenol; $C_6H_3Br_3O$; [118-79-6] (2) Water; H_2O; [7732-18-5]	Ogston, A. G. *J. Chem. Soc.* 1936, *Part II*, 1713.
VARIABLES:	PREPARED BY:
One temperature	A. Vesala

EXPERIMENTAL VALUES:

t/°C	10^2g(1)/dm^3 a	10^4mol(1)/dm^3 b	10^6x(1) a
17-18	7.61	2.3	4.15

a. Calculated by F. W. Getzen.
b. Reported.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

There were no specifications in the original paper about the experimental methods. Also, the temperature at which the measurements were made was not well defined.

SOURCE AND PURITY OF MATERIALS:

$C_6H_3Br_3O$: Source and purity not specified.

H_2O: Source and purity not specified.

ESTIMATED ERROR:

REFERENCES: