COMPONENTS:	ORIGINAL MEASUREMENTS:
(1) Ammonia; NH_3; [7664-41-7] (2) Tetramethylsilane; $C_4H_{12}Si$; [75-76-3]	Horsman-van den Dool, L. E. W.; Warman, J. W. Interuniversity Reactor Institute (IRI)-Report 134-81-01
VARIABLES: T/K = 292.9 p_1/kPa not given	PREPARED BY: H. L. Clever

EXPERIMENTAL VALUES:

Temperature		Ostwald Coefficient	Number of Runs
t/°C	T/K	L/cm^3 cm^{-3}	
19.7	292.9	5.73	1

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

A cylindrical glass container of approximately 15 cm^3 volume is partly filled with solvent and closed with a half-hole septum. An amount of the gaseous solute is added to the container. The closed container is shaken for 30 minutes. Samples of both the vapor and liquid phases are taken in calibrated syringes. The samples are injected into a gas chromatograph. The Ostwald coefficient is calculated from the known sample size and the measured peak areas.

The chromatograph is a Hewlett-Packard model 5750 equiped with a thermal conductivity cell detector. The carrier gas is helium. A 90 cm column packed with Porapak Q coated with 10 % polyethyleneimine is used for the separation.

SOURCE AND PURITY OF MATERIALS:

(1) Ammonia. Baker Chemical Co. Anhydrous, 99.99 percent. Used as received.

(2) Tetramethylsilane. Merck. Uvasol grade. Impurities which give the same retention time as the gas are removed before the experiment by adsorption or distillation.

ESTIMATED ERROR:

$\delta L/L = \pm 0.05$

REFERENCES: