COMPONENTS:	ORIGINAL MEASUREMENTS:
1. *N*-Methylmethanamine (dimethylamine); C_2H_7N; [124-40-3] 2. 1-Phenylethanone (methyl phenyl ketone); C_8H_8O; [98-86-2]	Gerrard, W. *Solubility of Gases and Liquids*, *Plenum* 1976, Chapter 10.
VARIABLES:	PREPARED BY:
Pressure	C. L. Young

EXPERIMENTAL VALUES:

T/K	*P*/mmHg	*P*/10^5Pa	Mole fraction of dimethylamine in liquid, $x_{(CH_3)_2NH}$
293.15	100	0.133	0.068
	200	0.267	0.135
	300	0.400	0.204
	400	0.533	0.276
	500	0.667	0.344
	600	0.800	0.418
	700	0.933	0.500
	760	1.013	0.559

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by a manometer assembly. The amount of abosrbed gas was estimated by weighing. The temperature was manually controlled to within 0.2K.
The apparatus and procedure are described by Gerrard [1,2].

SOURCE AND PURITY OF MATERIALS:

1. British Drug Houses or Cambrian Gases sample.

2. Purified and attested by conventional procedures.

ESTIMATED ERROR:

$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$

(estimated by compiler)

REFERENCES:

1. Gerrard, W.
J. Appl. Chem. Biotechnol. 1972, *22* 623-650.
2. Gerrard, W.
Solubility of Gases and Liquids. Plenum Press, New York. 1976.
Chapter 1.

COMPONENTS:	ORIGINAL MEASUREMENTS:
1. *N*-Methylmethanamine (dimethylamine); C_2H_7N; [124-40-3] 2. Ethoxybenzene (ethyl phenyl ether); $C_8H_{10}O$; [103-73-1]	Gerrard, W. *Solubility of Gases and Liquids*, *Plenum* 1976, Chapter 10.
VARIABLES: Pressure	PREPARED BY: C. L. Young

EXPERIMENTAL VALUES:

T/K	*P*/mmHg	$P/10^5$Pa	Mole fraction of dimethylamine in liquid, $x_{(CH_3)_2NH}$
293.15	100	0.133	0.067
	200	0.267	0.136
	300	0.400	0.206
	400	0.533	0.278
	500	0.667	0.350
	600	0.800	0.423
	700	0.933	0.502
	760	1.013	0.554

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by a manometer assembly. The amount of absorbed gas was estimated by weighing. The temperature was manually controlled to within 0.2K.
The apparatus and procedure are described by Gerrard [1,2].

SOURCE AND PURITY OF MATERIALS:

1. British Drug Houses or Cambrian Gases sample.

2. Purified and attested by conventional procedures.

ESTIMATED ERROR:

$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$
(estimated by compiler)

REFERENCES:

1. Gerrard, W.
J. Appl. Chem. Biotechnol. 1972, *22* 623-650.
2. Gerrard, W.
Solubility of Gases and Liquids. *Plenum Press, New York.* 1976.
Chapter 1.

COMPONENTS:	ORIGINAL MEASUREMENTS:
1. *N*-Methylmethanamine (dimethylamine); C_2H_7N; [124-40-3] 2. Benzoic acid, ethyl ester (ethyl benzoate); $C_9H_{10}O_2$; [93-89-0]	Gerrard, W. *Solubility of Gases and Liquids*, *Plenum* 1976, Chapter 10.
VARIABLES: Pressure	PREPARED BY: C. L. Young

EXPERIMENTAL VALUES:

T/K	*P*/mmHg	*P*/10^5Pa	Mole fraction of dimethylamine in liquid, $x_{(CH_3)_2NH}$
293.15	100	0.133	0.072
	200	0.267	0.146
	300	0.400	0.218
	400	0.533	0.291
	500	0.667	0.367
	600	0.800	0.442
	700	0.933	0.523
	760	1.013	0.572

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by a manometer assembly. The amount of absorbed gas was estimated by weighing. The temperature was manually controlled to within 0.2K.
The apparatus and procedure are described by Gerrard [1,2].

SOURCE AND PURITY OF MATERIALS:

1. British Drug Houses or Cambrian Gases sample.

2. Purified and attested by conventional procedures.

ESTIMATED ERROR:

$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$

(estimated by compiler)

REFERENCES:

1. Gerrard, W.
J. Appl. Chem. Biotechnol. 1972, *22* 623-650.
2. Gerrard, W.
Solubility of Gases and Liquids. Plenum Press, New York. 1976. Chapter 1.

COMPONENTS:	ORIGINAL MEASUREMENTS:
1. *N*-Methylmethanamine (dimethylamine); C_2H_7N; [124-40-3] 2. 1,1'-Oxybispentane (dipentyl ether); $C_{10}H_{22}O$; [693-65-2]	Gerrard, W. *Solubilities of Gases and Liquids*, *Plenum* 1976, Chapter 10.
VARIABLES:	PREPARED BY:
Pressure	C. L. Young

EXPERIMENTAL VALUES:

T/K	*P*/mmHg	$P/10^5$Pa	Mole fraction of dimethylamine in liquid, $x_{(CH_3)_2NH}$
293.15	100	0.133	0.080
	200	0.267	0.160
	300	0.400	0.240
	400	0.533	0.318
	500	0.667	0.397
	600	0.800	0.477
	700	0.933	0.554
	760	1.013	0.596

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by a manometer assembly. The amount of absorbed gas was estimated by weighing. The temperature was manually controlled to within 0.2K.
The apparatus and procedure are described by Gerrard [1,2].

SOURCE AND PURITY OF MATERIALS:

1. British Drug Houses or Cambrian Gases sample.

2. Purified and attested by conventional procedures.

ESTIMATED ERROR:

$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$

(estimated by compiler)

REFERENCES:

1. Gerrard, W.
J. Appl. Chem. Biotechnol. 1972, *22* 623-650.
2. Gerrard, W.
Solubility of Gases and Liquids. *Plenum Press, New York.* 1976.
Chapter 1.

COMPONENTS:	ORIGINAL MEASUREMENTS:
1. *N*-Methylmethanamine (dimethylamine); C_2H_7; [124-40-3] 2. 1,1'-Oxybisoctane (dioctyl ether); $C_{16}H_{34}O$; [629-82-3]	Gerrard, W. *Solubility of Gases and Liquids*, *Plenum* 1976, Chapter 10.
VARIABLES:	PREPARED BY:
Pressure	C. L. Young

EXPERIMENTAL VALUES:

T/K	*P*/mmHg	*P*/10^5Pa	Mole fraction of dimethylamine in liquid, $x_{(CH_3)_2NH}$
293.15	100	0.133	0.090
	200	0.267	0.173
	300	0.400	0.253
	400	0.533	0.330
	500	0.667	0.404
	600	0.800	0.477
	700	0.933	0.559
	760	1.013	0.605

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by a manometer assembly. The amount of absorbed gas was estimated by weighing. The temperature was manually controlled to within 0.2K.
The apparatus and procedure are described by Gerrard [1,2].

SOURCE AND PURITY OF MATERIALS:

1. British Drug Houses or Cambrian Gases sample.

2. Purified and attested by conventional procedures.

ESTIMATED ERROR:

$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$

(estimated by compiler)

REFERENCES:

1. Gerrard, W.
J. Appl. Chem. Biotechnol. 1972, *22* 623-650.
2. Gerrard, W.
Solubility of Gases and Liquids. Plenum Press, New York. 1976.
Chapter 1.