

EXPERIMENTAL VALUES:			Mole fraction of dimethylamine in liquid, $x(\text{CH}_3)_2\text{NH}$
T/K	P/mmHg	P/10 ⁵ Pa	
283.15	100	0.133	0.066
	200	0.267	0.155
	300	0.400	0.255
	400	0.533	0.364
	500	0.667	0.490
	600	0.800	0.625
	700	0.933	0.766
	760	1.013	0.848
288.15	760	1.013	0.686
293.15	200	0.267	0.102
	300	0.400	0.160
	400	0.533	0.221
	500	0.667	0.294
	600	0.800	0.375
	700	0.933	0.461
	760	1.013	0.511
298.15	760	1.013	0.412

AUXILIARY INFORMATION	
METHOD/APPARATUS/PROCEDURE:	SOURCE AND PURITY OF MATERIALS:
<p>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].</p>	<p>1. British Drug Houses or Cambrian Gases sample.</p> <p>2. Purified and attested by conventional procedures.</p>
	ESTIMATED ERROR:
	<p>$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$</p> <p>(estimated by compiler)</p>
REFERENCES:	
	<p>1. Gerrard, W. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u>, 22 623-650.</p> <p>2. Gerrard, W. <i>Solubility of Gases and Liquids</i>, Plenum Press, New York. <u>1976</u>. Chapter 1.</p>

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3]			Gerrard, W.
2. Pyridine; C ₅ H ₅ N; [110-86-1] or Quinoline; C ₉ H ₇ N; [91-22-5]			<i>Solubility of Gases and Liquids</i> , <i>Plenum 1976</i> , 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) ₂ NH
		Pyridine; C ₅ H ₅ N; [110-86-1]	
293.15	700	0.933	0.507
	760	1.013	0.564
		Quinoline; C ₉ H ₇ N; [91-22-5]	
293.15	100	0.133	0.060
	200	0.267	0.126
	300	0.400	0.191
	400	0.533	0.255
	500	0.667	0.322
	600	0.800	0.394
	700	0.933	0.472
	760	1.013	0.522
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
<p>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].</p>		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . <i>Plenum Press, New York.</i> <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethylamine); C_2H_7N ; [124-40-3] 2. Nitrobenzene; $C_6H_5NO_2$; [98-95-3]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , Plenum <u>1976</u> , 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) ₂ NH
293.15	100	0.133	0.053
	200	0.267	0.110
	300	0.400	0.169
	400	0.533	0.233
	500	0.667	0.300
	600	0.800	0.375
	700	0.933	0.456
	760	1.013	0.506
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
Amine was passed into a known weight of pure liquid in a bubbler tube at a total pressure measured by 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].		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . Plenum Press, New York. <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:	
1. N-Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3]			Gerrard, W.	
2. Benzenamine (Aniline); C ₆ H ₇ N; [62-53-3]			<i>Solubility of Gases and Liquids,</i> <i>Plenum 1976, Chapter 10.</i>	
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) ₂ NH	
293.15	100	0.133	0.137	
	200	0.267	0.253	
	300	0.400	0.350	
	400	0.533	0.437	
	500	0.667	0.515	
	600	0.800	0.584	
	700	0.933	0.648	
	760	1.013	0.687	
AUXILIARY INFORMATION				
METHOD/APPARATUS/PROCEDURE:			SOURCE AND PURITY OF MATERIALS:	
<p>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].</p>			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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650.	
			2. Gerrard, W. <i>Solubility of Gases and Liquids.</i> Plenum Press, New York. <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3] 2. Benzonitrile; C ₇ H ₅ N; [100-47-0]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , Plenum <u>1976</u> , Chapter 10.
VARIABLES:			PREPARED BY:
Temperature, pressure			C. L. Young
EXPERIMENTAL VALUES:			
T/K	P/mmHg	P/10 ⁵ Pa	Mole fraction of dimethylamine in liquid, x (CH ₃) ₂ NH
283.15	100	0.133	0.100
	200	0.267	0.200
	300	0.400	0.310
	400	0.533	0.424
	500	0.667	0.540
	600	0.800	0.660
	700	0.933	0.780
293.15	760	1.013	0.848
	100	0.133	0.075
	200	0.267	0.150
	300	0.400	0.224
	400	0.533	0.296
	500	0.667	0.368
	600	0.800	0.443
	700	0.933	0.524
	760	1.013	0.576
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
<p>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.</p> <p>The apparatus and procedure are described by Gerrard [1,2].</p>		<p>1. British Drug Houses or Cambrian Gases sample.</p> <p>2. Purified and attested by conventional procedures.</p>	
		ESTIMATED ERROR:	
		$\delta T/K = \pm 0.1$; $\delta x/x = \pm 3\%$ (estimated by compiler)	
		REFERENCES:	
		<p>1. Gerrard, W. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u>, 22 623-650.</p> <p>2. Gerrard, W. <i>Solubility of Gases and Liquids</i>. Plenum Press, New York. <u>1976</u>. Chapter 1.</p>	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethyl-amine); C ₂ H ₇ N; [124-40-3] 2. 1-Methyl-2-nitrobenzene (o-nitrotoluene); C ₇ H ₇ NO ₂ ; [88-72-2]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , Plenum <u>1976</u> , 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, $x(\text{CH}_3)_2\text{NH}$
293.15	100	0.133	0.060
	200	0.267	0.117
	300	0.400	0.178
	400	0.533	0.240
	500	0.667	0.303
	600	0.800	0.370
	700	0.933	0.450
	760	1.013	0.505
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
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].		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650.	
		2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . Plenum Press, New York. <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3] 2. N-Methylbenzenamine (N-methylaniline); C ₇ H ₉ N; [100-61-8]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , <i>Plenum 1976</i> , 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, $x(\text{CH}_3)_2\text{NH}$
293.15	200	0.267	0.240
	300	0.400	0.334
	400	0.533	0.414
	500	0.667	0.482
	600	0.800	0.547
	700	0.933	0.611
	760	1.013	0.650
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:			SOURCE AND PURITY OF MATERIALS:
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].			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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . Plenum Press, New York. <u>1976</u> . Chapter 1.

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3]			Gerrard, W.
2. Benzenemethanamine, (Benzylamine); C ₇ H ₉ N; [100-46-9]			<i>Solubility of Gases and Liquids</i> , <i>Plenum, 1976</i> , Chapter 10.
VARIABLES:			PREPARED BY:
Temperature, pressure			C. L. Young
EXPERIMENTAL VALUES:			
T/K	P/mmHg	P/10 ⁵ Pa	Mole fraction of dimethylamine in liquid, x (CH ₃) ₂ NH
283.15	760	1.013	0.815
293.15	100	0.133	0.075
	200	0.267	0.145
	300	0.400	0.220
	400	0.533	0.296
	500	0.667	0.375
	600	0.800	0.452
	700	0.933	0.532
	760	1.013	0.580
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
<p>Aminé 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].</p>		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , <i>22</i> 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . <i>Plenum Press, New York.</i> <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. <i>N</i> -Methylmethanamine (dimethylamine); C ₂ H ₇ N; [124-40-3] 2. <i>N</i> -Ethylbenzenamine (<i>N</i> -ethyl-aniline); C ₈ H ₁₁ N; [103-69-5]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , <i>Plenum 1976</i> , 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) ₂ NH
293.15	200	0.267	0.238
	300	0.400	0.332
	400	0.533	0.411
	500	0.667	0.480
	600	0.800	0.547
	700	0.933	0.611
	760	1.013	0.650
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
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].		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . <i>Plenum Press, New York.</i> <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethyl-amine); C ₂ H ₇ N; [124-40-3] 2. N,N-Dimethylbenzenamine (N,N-dimethylaniline); C ₈ H ₁₁ N; [121-69-7]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , <i>Plenum 1976</i> , Chapter 10.
VARIABLES:			PREPARED BY:
Temperature, pressure			C. L. Young
EXPERIMENTAL VALUES:			
			Mole fraction of dimethylamine in liquid, x (CH ₃) ₂ NH
T/K	P/mmHg	P/10 ⁵ Pa	
283.15	100	0.133	0.086
	200	0.267	0.180
	300	0.400	0.280
	400	0.533	0.386
	500	0.667	0.508
	600	0.800	0.638
	700	0.933	0.780
	760	1.013	0.848
293.15	100	0.133	0.061
	200	0.267	0.127
	300	0.400	0.192
	400	0.533	0.257
	500	0.667	0.330
	600	0.800	0.404
	700	0.933	0.485
	760	1.013	0.538
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
<p>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].</p>		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . <i>Plenum Press, New York.</i> <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine, (dimethylamine); C ₂ H ₇ N; [124-40-3]			Gerrard, W.
2. 1-Octanamine (octylamine); C ₈ H ₁₉ N; [111-86-4]			<i>Solubility of Gases and Liquids</i> , <i>Plenum 1976</i> , Chapter 10.
VARIABLES:			PREPARED BY:
Temperature, pressure			C. L. Young
EXPERIMENTAL VALUES:			
T/K	P/mmHg	P/10 ⁵ Pa	Mole fraction of dimethylamine in liquid, x(CH ₃) ₂ NH
283.15	100	0.133	0.120
	200	0.267	0.242
	300	0.400	0.363
	400	0.533	0.486
	500	0.667	0.603
	600	0.800	0.713
	700	0.933	0.825
	760	1.013	0.888
293.15	100	0.133	0.093
	200	0.267	0.183
	300	0.400	0.266
	400	0.533	0.347
	500	0.667	0.428
	600	0.800	0.506
	700	0.933	0.583
	760	1.013	0.626
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
<p>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.</p> <p>The apparatus and procedure are described by Gerrard [1,2].</p>		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . <i>Plenum Press, New York.</i> <u>1976</u> . Chapter 1.	

COMPONENTS:			ORIGINAL MEASUREMENTS:
1. N-Methylmethanamine (dimethyl-amine); C_2H_7N ; [124-40-3] 2. N,N-Diethylbenzenamine (N,N-diethylaniline); $C_{10}H_{15}N$; [91-66-7]			Gerrard, W. <i>Solubility of Gases and Liquids</i> , Plenum <u>1976</u> , 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	0.072
	200	0.267	0.141
	300	0.400	0.211
	400	0.533	0.281
	500	0.667	0.354
	600	0.800	0.429
	700	0.933	0.510
	760	1.013	0.557
AUXILIARY INFORMATION			
METHOD/APPARATUS/PROCEDURE:		SOURCE AND PURITY OF MATERIALS:	
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].		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. <i>J. Appl. Chem. Biotechnol.</i> <u>1972</u> , 22 623-650. 2. Gerrard, W. <i>Solubility of Gases and Liquids</i> . Plenum Press, New York. <u>1976</u> . Chapter 1,	