

Table: **Basic Physical Properties of Common Solvents**

No.	material or substance name	molecular formula	mol. weight	CAS Registry No.	UN No.	RTECS No.	state	color	odor	boiling point (°C)
351	Trichlorofluoromethane	$\text{CCl}_3\text{F}$	137.36	75-69-4	1017	PB1250000	Liquid	colorless	nearly odorless	23.63
352	1,1,2-Trichlorotrifluoroethane	$\text{C}_2\text{Cl}_3\text{F}_3$	187.37	76-13-1		KJ4000000	Liquid	colorless	$\text{CCl}_4$ -like	47.6
353	Triethanolamine	$\text{C}_6\text{H}_{15}\text{NO}_3$	149.22	102-71-6		KL9275000	Liquid	colorless	characteristic	335.4
354	Triethyl phosphate	$\text{C}_6\text{H}_{15}\text{O}_4$	182.16	78-40-0			Liquid	colorless	mild	215
355	Triethyl phosphite	$\text{C}_6\text{H}_{15}\text{O}_3\text{P}$	166.2	122-52-1	2323	TH1130000	Liquid	colorless	obnoxious	157
356	Triethylamine	$\text{C}_6\text{H}_{15}\text{N}$	101.22	121-44-8	1296	YEO175000	Liquid	colorless	ammonia-like	89
357	Triethylene glycol	$\text{C}_6\text{H}_{14}\text{O}_4$	150.2	112-27-6		YE4550000	Liquid	colorless	odorless	287.4
358	Triethylene glycol butyl ether	$\text{C}_{10}\text{H}_{22}\text{O}_4$	206.3	143-22-6		KJ9450000	Liquid	colorless		
359	Triethylene glycol ethyl ether	$\text{C}_8\text{H}_{18}\text{O}_4$	178.3	112-50-5		KK8950000	Liquid	colorless		255
360	Triethylenetetramine	$\text{C}_6\text{H}_{18}\text{N}_4$	146.3	112-24-3	2259	YE6650000	Liquid	colorless	characteristic	266
361	2,2,2-Trifluoroethanol	$\text{C}_2\text{H}_3\text{F}_3\text{O}$	100	75-89-8			Liquid			105
362	Trifluoromethane	$\text{CHF}_3$	70.02	75-46-7		PB6900000	Gas	colorless	none	-84.4
363	Triisopropanolamine	$\text{C}_9\text{H}_{21}\text{NO}_3$	191.27	122-20-3		UB8750000	Solid	white		104
364	Triisopropyl borate	$\text{C}_9\text{H}_{21}\text{BO}_3$	188.08	5419-55-6	2616	ED5950000	Liquid	colorless		142
365	Trimethyl orthoformate	$\text{C}_4\text{H}_{10}\text{O}_3$	106.1	149-73-5			Liquid	colorless	pungent	102
366	2,2,4-Trimethyl pentane	$\text{C}_8\text{H}_{18}$	114.3	540-84-1	1262	SA3320000	Liquid	colorless	characteristic	99
367	2,4,4-Trimethyl-1-pentene	$\text{C}_8\text{H}_{16}$	112.2	107-39-1	2050	SB2717300	Liquid	colorless	characteristic	101
368	2,4,4-Trimethyl-2-pentene	$\text{C}_8\text{H}_{16}$	112.2	107-40-4	2050		Liquid	colorless		104
369	1,3,5-Trioxane	$\text{C}_3\text{H}_6\text{O}_3$	90.09	110-88-3		YK0350000	Solid	colorless	mild, pleasant	114.5
370	Tripropylene glycol	$\text{C}_9\text{H}_{20}\text{O}_4$	192.2	24800-44-0			Liquid	colorless		273
371	n-Undecane	$\text{C}_{11}\text{H}_{24}$	156.31	1120-21-4	2330		Liquid	colorless	gasoline	196
372	Valeric acid	$\text{C}_5\text{H}_{10}\text{O}_2$	102.1	109-52-4		YV6100000	Liquid	colorless	pungent	186
373	Vinyl acetate	$\text{C}_4\text{H}_6\text{O}_2$	86.1	108-05-4	1301	AK0875000	Liquid	colorless		72

374	Vinyl ethyl ether	C <sub>4</sub> H <sub>8</sub> O	72.1	109-92-2	1302	KO0710000	Liquid	colorless	characteristic	36
375	N-Vinyl-2-pyrrolidone	C <sub>6</sub> H <sub>9</sub> NO	111.1	88-12-0			Liquid	colorless		219
376	4-Vinylcyclohexene	C <sub>8</sub> H <sub>12</sub>	108.2	100-40-3	1993	GW6650000	Liquid	colorless		130
377	Vinylidene chloride	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	97	75-35-4	1303	KV9275000	Liquid	colorless	characteristic	32
378	2-Vinylpyridine	C <sub>7</sub> H <sub>7</sub> N	105.14	100-69-6			Liquid			159
379	VM & P Naphtha			8032-32-4	1271	OI6180000	Liquid	colorless	gasoline	47.5
380	m-Xylene	C <sub>8</sub> H <sub>10</sub>	106.18	108-38-3	1307	ZE2275000	Liquid	colorless	aromatic	139.1
381	o-Xylene	C <sub>8</sub> H <sub>10</sub>	106.18	95-47-6	1307	ZE2450000	Liquid	colorless	aromatic	144.4
382	p-Xylene	C <sub>8</sub> H <sub>10</sub>	106.18	106-42-3	1307	ZE2625000	Liquid	colorless	aromatic	138.4
383	2,3-Xylenol	C <sub>8</sub> H <sub>10</sub> O	122.17	526-75-0		ZE5500000	Solid	white		217
384	2,4-Xylenol	C <sub>8</sub> H <sub>10</sub> O	122.17	105-67-9	2261	ZE5600000	Liquid	colorless	aromatic	203
385	2,5-Xylenol	C <sub>8</sub> H <sub>10</sub> O	122.17	95-87-4		ZE5775000	Solid	white		212

No.	freezing point (°C)	density (g/cm <sup>3</sup> )	specific heat (cal/(mol K))	thermal cond. (cal/(cm s K))	heat of vaporization (cal/g)	Hildebrand sol. param. (cal <sup>1/2</sup> cm <sup>-3/2</sup> )
351	-110.5	1.476 [25°C]	29.05	0.00021	5.98 [25°C]	7.6
352	-36.4	1.563 [25°C]	41.5	0.000157	6.86 [25°C]	7.25
353	21.6	1.1196 [25°C]	74.1		16.13	13.36
354	-56	1.067 [25°C]				
355		0.97				
356	-115	0.72305 [25°C]	53.4		8.32 [25°C]	7.42
357	-7.2	1.1195 [25°C]	77.6		17.1	10.7
358	-48	1.01 [20°C]				
359	-19	1.02 [20°C]				
360	12	0.98 [25°C]				
361	-43	1.288				11.47
362	-155.2	1.44 [15°C]	12.32	8e-005	4.01	8.63
363	45	1.03 [20°C]				
364	-59	0.818 [25°C]				
365	15	0.943				8
366	-107	0.69 [25°C]				7.06
367	-93	0.7 [20°C]				
368	-106	0.72 [20°C]				
369	64	1.17 [65°C]				
370		1.02 [25°C]				
371	-26	0.744 [25°C]				
372	-35	0.94 [25°C]				11.86
373	-93	0.926 [25°C]				
374	-115	0.8 [20°C]				
375	13	1.043 [25°C]				
376	-109	0.829 [25°C]				
377	-122	1.2 [25°C]				
378		0.9746				
379	-73	0.655 [20°C]				
380	-47.9	0.86009 [25°C]	43.84		10.19 [25°C]	8.8
381	-25.2	0.87594 [25°C]	44.95		10.38 [25°C]	8.8
382	-13.3	0.85661 [25°C]	43.42		10.13 [25°C]	8.77

383	70					
384	25	1.02 [25°C]				11.04
385	71					

No.	surface tension (mN/m)	water solubility (mg/kg)	viscosity (cP)	dielec. const.	electrical conductivity (pS/m)	refractive index	Henry's law const. (atm m <sup>3</sup> /mol)
351	18	1100	0.443 [20°C]	2.303		1.379	0.097
352	17.75	170	0.711 [20°C]	2.41		1.355	0.526
353	45.24	infinite	613.6 [25°C]	29.36		1.483	3.38E-19
354		500000	1.38 [25°C]			1.402	0.000000103
355		reaction				1.413	
356	20.66	170000	0.363 [25°C]	2.423		1.398	0.000138
357	45.2	infinite	49 [20°C]	23.69		1.456	0.0000000000316
358		miscible				1.439	
359		infinite					
360		infinite	152.9 [25°C]			1.497	
361			1.76 [25°C]			1.291	
362	0.03	900	0.167 [30°C]	1.007		1.215	0.00101
363							
364						1.377	
365						1.379	
366		2.1	0.475 [25°C]			1.389	3.46
367		8.1	0.295 [25°C]			1.409	0.818
368		6.6	0.298 [25°C]				0.799
369		175000					0.000000197
370			80 [20°C]			1.444	
371		0.044	1.1 [25°C]			1.44	1.92
372		20000	1.975 [25°C]			1.406	0.00000134
373		25000	0.403 [25°C]			1.396	0.000497
374			0.235 [25°C]			1.376	
375			2 [25°C]				
376		50	0.315 [25°C]				0.0446
377		2500	0.41 [25°C]				0.023
378		28000				1.551	
379		traces				1.385	
380	28.1	174	0.581 [25°C]	2.374		1.495	0.00734
381	29.49	221	0.756 [25°C]	2.568		1.503	0.00519
382	27.76	201	0.605 [25°C]	2.27		1.496	0.00766
383		4560				1.542	

384		7900	68.5 [25°C]			1.525	
385		3500					

No.	vapor density	vapor pressure (kPa)
351	4.74	107.06 [25°C]
352	6.46	48.266 [25°C]
353	5.1	0.00000359 [25°C]
354		0.13 [40°C]
355		
356	3.5	7.61 [25°C]
357	5.2	0 [25°C]
358		
359	6.2	0.0068 [20°C]
360	5.1	0.0013 [20°C]
361		10.1 [25°C]
362	2.41413	4000 [20°C]
363		
364		
365	3.67	
366	3.9	5.1 [20°C]
367	3.9	10 [38°C]
368	3.9	11.02 [38°C]
369	3.11	1.73 [25°C]
370	6.63	
371	5.4	
372	3.5	0.02 [20°C]
373	3	11.7 [20°C]
374	2.5	57 [20°C]
375	3.8	0.013 [24°C]
376	3.7	3.43 [38°C]
377	3.3	66.5 [20°C]
378		
379	3	5.333 [20°C]
380	3.7	1.11 [25°C]
381	3.7	0.88 [25°C]
382	3.7	1.16 [25°C]
383	4.23	

384		0.013 [20°C]
385		