

# PPG VERSOLON™ solvents and properties



Product Code	Product Name	% Organic HAPs (VHAP) <sup>1</sup>	Density or wt./ gal <sup>2</sup>	Flash point <sup>3</sup> (F°)	Evaporation rate <sup>4</sup>	Solvent strength <sup>5</sup>	Restivity/ polarity (MΩ) <sup>6</sup>	Flow rating <sup>7</sup>	Description and comments
<b>Alcohols</b>									
Q20	Isopropanol (Isopropyl Alcohol)	0%	6.51	53	1.70	NA	0.05	1	A very fast evaporating alcohol solvent that is used as a component in lacquer thinner blends and is HAPS compliant. Can be used to remove mould release from plastic parts.
<b>Ketone Solvents</b>									
Q30	Acetone CP	0%	6.59	4	7.70	NA	0.01	1	A very fast evaporating ketone with strong solvent strength. It can be used by itself as a VOC compliant solvent or in a blend to reduce viscosities of most polymers. Be aware that acetone is hygroscopic and can bring water into a coating.
Q60	Methyl Ethyl Ketone (MEK)	0%	6.68	21	4.60	NA	0.05	2	A polar solvent that can be used by itself or as a blend to reduce most polymers. It has a fast to moderate evaporation rate.
Q75	Methyl Isobutyl Ketone (MIBK)	99.96%	6.68	60	1.60	NA	0.22	5	A moderate evaporating ketone solvent that can be used by itself or a component in blends to reduce most polymers. It has a moderate evaporation rate.
Q70	Methyl Amyl Ketone (MAK)	0%	6.84	102	0.40	NA	0.70	8	A slow evaporating ketone solvent used to retard the evaporation rate of coatings. It can be used by itself in small quantities or in blends as a tail solvent to help with flow and leveling.
<b>Aliphatic Hydrocarbons</b>									
Q151	VM&P Naphtha	0%	6.26	55	0.45	34	20.00	1	A medium evaporating cycloaliphatic solvent used in alkyd enamels to lower film sagging and speed flash times.
Q100	Mineral Spirits (Paint Thinner)	0%	6.51	104	0.12	37	20.00	8	A diluent used to thin alkyd enamels for flow and brushability.

1. Percent organic HAPs (Hazardous Air Pollutants) contained in the solvent.

2. Density measured in pounds/gallon.

3. Flash point measured on a Pensky-Martens Closed Cup (PMCC).

4. Evaporation rate of the solvent as related to n-butyl acetate (The value for n-butyl acetate = 1.0).

5. Solvent strength (Kauri-Butanol value) is the ability to solubilize resin and lower viscosity (hydrocarbon solvents only).

6. Restivity measured in megaohms. A high resistance (>20 Megohms) means the solvent is non-conductive and will exhibit poor electrostatic spray. A coating that measures low resistance (<.05 Megohms) may be too conductive to spray.

7. Flow rating is an arbitrary number given to the solvent based on it's ability to help the coating flow and level to a smooth finish (scale of 1-10).

8. Evaporation rate was determined in a PPG laboratory at 77° F and 20% RH.

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<b>Aromatic Hydrocarbons</b>									
Q80	Xylene (Xylol)	100%	7.26	81	0.75	98	20.00	5	A medium-fast aromatic solvent used by itself or in blends to reduce the viscosity of most polymers. Like Toluene, it will not redissolve most dried polymers but will soften them, therefore, it can be used to gain adhesion over old coatings without lifting.
Q50	Aromatic 100 (Hi Sol 10, Shellsol A100, or High-Flash Naphtha)	4.51%	7.26	106	0.19	92	20.00	8	Has a solvent strength very similar to toluene and xylene with a much slower evaporation rate and much higher flash point. This is not to be confused with VM&P Naphtha. Aromatic 100 contains five percent HAPS solvent.
Q160	Aromatic 150	9.90%	7.43	145	0.04	92	20	9	Has a solvent strength very similar to toluene and xylene with a slower evaporation rate and higher flash point than the Aromatic 100.
<b>Acetate Esters</b>									
Q10	n-Butyl Acetate, Urethane Grade	0%	7.34	77	1.00	NA	19.00	5	A medium fast ester that can be used by itself or in blends to reduce the viscosity of most polymers. The evaporation rate of n-butyl acetate is used as the standard and is given a value of 1.0 on the chart.
Q15	Glycol Ether (PM Acetate)	0%	8.01	114	0.39	NA	2.70	7	Can be used as a moderate tail solvent.
<b>Lacquer Thinners</b>									
Q103	Lacquer Thinner	38.36%	6.76	11	NA	NA	NA	1	A general purpose lacquer thinner.
TFS909	Wash Solvent	81.28%	6.89	22	NA	NA	NA	1	A very fast evaporating lacquer thinner that is designed as a flushing solvent for spray equipment, guns and hoses. It contains alcohol and should not be used to thin urethanes.
<b>Miscellaneous</b>									
TFA880-70	PPG AQUATHIN® Refresher	7.50%	8.10	140	214 min. <sup>8</sup>	NA	∞	10	A refresher for water reducible coatings and can be used as a compliant parts cleaner
Water	Water	0%	8.33	999	120 min. <sup>8</sup>	NA	∞	9	Ordinary tap water.
TFS321-50	PPG SPECTRATHIN® Exempt Blend	0%	8.43	4	30 min. <sup>8</sup>	NA	0.11	6	An exempt blend of reducers that can be used in a coating to maintain a specific VOC level.

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<b>Urethane Blends</b>									
TFS310-30	<i>SpectraThin</i> 310 Moderate Reducer	60.82%	6.84	21	18 min. <sup>8</sup>	NA	0.20	4	A fast-to-moderate evaporating solvent blend specifically designed for AUE-110 urethane.
TFS310-50	<i>SpectraThin</i> 310 Slow Reducer	19.79%	7.26	35	30 min. <sup>8</sup>	NA	27.90	5	A slow evaporating solvent blend specifically designed for AUE-110 urethane and will promote better flow and leveling in hot weather.
TFS309-30	<i>SpectraThin</i> Urethane, Fast	36.44%	6.59	7	12 min. <sup>8</sup>	NA	2.20	3	A fast evaporating urethane grade solvent blend that is designed for AUE-100, AUE-360, AUE-370 and AUE-380 series 2K urethane products.
TFS309-60	<i>SpectraThin</i> Urethane, Medium	24.77%	6.84	24	34 min. <sup>8</sup>	NA	1.50	6	A moderate evaporating urethane grade solvent blend that is designed for AUE-100, AUE-360, AUE-370 and AUE-380 series 2K urethane products.
TFS309-80	<i>SpectraThin</i> Urethane, Slow	17.21%	6.84	40	85 min. <sup>8</sup>	NA	1.20	8	A slow evaporating urethane grade solvent blend that is designed for AUE-100, AUE-360, AUE-370 and AUE-380 series 2K urethane products.
TFS309-90	<i>SpectraThin</i> Urethane, Very Slow	21.11%	6.84	45	110 min. <sup>8</sup>	NA	4.00	10	A very slow evaporating urethane grade solvent blend that is designed for AUE-100, AUE-360, AUE-370 and AUE-380 series 2K urethane products.