# CPC/LIC SpectraThin® Urethane Reducers — Technical Bulletin CPCTB06

The *SpectraThin* series reducers are high quality urethane grade reducers, which can be used in many CPC urethane undercoats and topcoats. The *SpectraThin* series blended reducers improve the leveling and through cure characteristics of primers and topcoats, compared to using straight solvents such as Acetone or MAK.

**Products:**

- TFS309-30 Fast Urethane Reducer
- TFS309-60 Medium Urethane Reducer
- TFS309-80 Slow Urethane Reducer
- TFS309-90 Very Slow Urethane Reducer
- TFS321-50 Exempt Reducer

**These reducers may be used in the following coatings products:**

| Products | Description | Comments |
|---|---|---|
| AUE-100 (+AUE100LG) | Acrylic Urethane Enamel | Up to 20% reduction with TFS series solvents in non-regulated. VOC areas. VOC= 4.63 - 5.24lbs/gal |
| AUE-280 (+ AUE-280LG) | 2.8 VOC Polyurethane Enamel | Q30 Acetone or TFS321-50 exempt reducer up to 10% for reduction. |
| AUE-300 | Acrylic Urethane Enamel | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. VOC = 2.87 – 3.82 lbs/gal |
| AUE-360/AUE-360LG | 2K High Solids Urethane | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. VOC = 2.82 – 3.84lbs/gal |
| AUE-360 (+AUE360LG) w/AUE3606 | 2K High Solids Urethane | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. |
| AU36-FP9xx | 2K High Solids Polyurethane Topcoat | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents VOC = 2.89 – 3.26lbs/gal |
| AUE-370 | Direct to Metal Polyurethane | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. VOC = 2.33 – 3.19lbs/gal |
| AUE-400LG | Low VOC Polyurethane Enamel - Low Gloss | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. VOC = 3.21 – 3.81lbs/gal |
| HSP-2128 Series | Polyurethane Primer | Q30 Acetone or TFS321-50 exempt reducer 10% - 25% for reduction. |
| W43181A / HSP528 | 2K High Solids Urethane Primer | Can be thinned up to 10% in non-regulated VOC areas with TFS series solvents. VOC = 2.92 – 3.47lbs/gal |

# CPC/LIC SpectraThin® Urethane Reducers — Technical Bulletin CPCTB06

**Physical Constants:** *All values are theoretical. Actual values could vary slightly due to manufacturing variability.*

| TFS Code | Name | % Organic HAPS[1] (VHAP) | Density or Wt/Gal[2] | Flash Point[3] | Evaporation Rate[4-4a] | Resistivity/ Polarity[5] | Flow Rating[6] | Comments |
|---|---|---|---|---|---|---|---|---|
| **TFS309-30** | *SpectraThin* Fast Urethane Reducer | 36.44% | 6.49 | 7 | 12 min. | 2.20 | 3 | TFS309-30 is a fast evaporating urethane grade solvent blend designed for 2K urethane products. |
| **TFS309-60** | *SpectraThin* Medium Urethane Reducer | 24.77% | 6.82 | 24 | 34 min. | 1.50 | 6 | TFS309-60 is a moderate evaporating urethane grade solvent blend designed for 2K urethane products. |
| **TFS309-80** | *SpectraThin* Slow Urethane Reducer | 17.21% | 6.81 | 40 | 85 min. | 1.20 | 8 | TFS309-80 is a slow evaporating urethane grade solvent blend designed for 2K urethane products. |
| **TFS309-90** | *SpectraThin* Very Slow Reducer | 21.11% | 6.82 | 45 | 110 min. | 4.00 | 10 | TFS309-90 is a very slow evaporating urethane grade solvent blend designed for 2K urethane products. |
| **TFS321-50** | *SpectraThin* Exempt Reducer | 0.00% | 8.43 | 4 | 120 min | 0.11 | 6 | TFS321-50 is an exempt urethane grade solvent blend designed for 2K urethane products. |

1. Percent organic HAPS (Hazardous Air Pollutant) 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)
4a. Evaporation rate was determined in the PPG lab at 77 °F / 25 °C and 20% RH
5. Resistivity - measured in Megohms. 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.
6. Flow Rating - an arbitrary number given to the solvent based on its ability to help the coating flow and level to a smooth finish (scale of 1-10)



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