CLAIMS:

1. An epoxy functional acrylic resin comprising, as copolymerized monomers:

   i) from about 10 wt.% to about 40 wt.% of one or more epoxy functional unsaturated monomers;

   ii) from about 10 wt.% to about 20 wt.% of one or more hydrophobic acrylic monomers, and

   iii) from greater than 50 wt.% to about 75 wt.% of at least one nonionic copolymer that is different from the hydrophobic acrylic monomers ii),

   each monomer wt.% based on the total weight of copolymerized monomers in the resin;

   wherein the resin has a T_g of greater than 92 degrees Celsius; and

   wherein the resin has a calculated solubility parameter from about 9.20 to about 9.30 $(cal/cm^3)^{1/2}$.

2. The epoxy functional acrylic resin of claim 1, wherein the one or more hydrophobic acrylic monomers ii) has a mass solubility in water of 3.5 g/L or less and which would itself form a homopolymer having a glass transition temperature (T_g) of about 50 degrees Celsius to about 175 degrees Celsius.

3. The epoxy functional acrylic resin of claim 1, wherein the one or more hydrophobic acrylic monomers ii) is a bicycloalkyl (meth)acrylate.

4. The epoxy functional acrylic resin of claim 3, wherein the bicycloalkyl (meth) acrylate is isobornyl (meth)acrylate.

5. The epoxy functional acrylic resin of claim 1, wherein the one or more hydrophobic acrylic monomers is present in an amount from about 14 wt.% to about 20 wt.%.

6. The epoxy functional acrylic resin of claim 5, wherein the at least one nonionic copolymer iii) is butyl (meth)acrylate or methyl methacrylate.

7. The epoxy functional acrylic resin of claim 1, wherein the at least one copolymerized monomer iii) is a C_1 to C_8 (cyclo)alkyl ester of (meth)acrylic acid.

8. The epoxy functional acrylic resin of claim 1, further comprising about 0.5 wt.% to about 12 wt.% of a vinyl aromatic monomer iv), based on the total weight of copolymerized monomers in the epoxy functional acrylic resin.

9. The epoxy functional acrylic resin of claim 6 wherein the vinyl aromatic monomer iv) is styrene.

10. A powder coating composition comprising:
the epoxy functional acrylic resin of claim 1; and
one or more crosslinkers for the resin.

11. The powder coating composition of claim 10, wherein the one or more crosslinkers is an organic dicarboxylic acid or anhydride, or an adduct thereof with a polyester or a polyisocyanate.

12. The powder coating composition of claim 10, further comprising one or more adjuvants selected from the group consisting of a hydrophobic submicron particle, an adhesion promoter, a light stabilizer, an ultraviolet

(UV) absorber and a combination thereof.

13. A coated substrate coated with a powder coating composition, said powder coating composition comprising:

the epoxy functional acrylic resin of claim 1; and

one or more crosslinkers for the resin.

14. The coated substrate of claim 13, wherein the substrate is aluminum or a forged alloy.