Summary

In an aspect of the present disclosure, there is disclosed a masterblend comprising, consisting of, or consisting essentially of a) a solvent selected from the group consisting of methyl ethyl ketone, acetone, Dowanol™ PM (mixture of l-hydroxy-2-methoxypropane and l-methoxy-2- hydroxypropane), cyclohexanone, Dowanol™ PMA (mixture of l-acetoxy-2-methoxypropane and l-methoxy-2-acetoxypropane), dimethylformamide (DMF), methyl isobutyl ketone (MIBK), xylene, toluene, methanol, and butanol and mixtures thereof; and b) a core shell rubber wherein the masterblend does not contain a thermosetting resin, wherein said core shell rubber has a styrene butadiene core and a shell selected from the group consisting of a methyl methacrylate and an acrylonitrile, said styrene butadiene core does not swell in said solvent.

In another aspect of the present disclosure, there is disclosed a process comprising, consisting of, or consisting essentially of a) dispersing a core/shell rubber in a solvent to form a masterblend; and b) admixing the masterblend with a thermosetting resin to form a curable composition, wherein the solvent is selected from the group consisting of methyl ethyl ketone, acetone, Dowanol™ PM (mixture of l-hydroxy-2-methoxypropane and l-methoxy-2- hydroxypropane), cyclohexanone, Dowanol™ PMA (mixture of l-acetoxy-2-methoxypropane and l-methoxy-2-acetoxypropane), dimethylformamide (DMF), methyl isobutyl ketone (MIBK), xylene, toluene, methanol, and butanol and mixtures thereof; said core shell rubber has a styrene butadiene core and a shell selected from the group consisting of a methyl methacrylate and an acrylonitrile, said styrene butadiene core does not swell in said solvent.

Another aspect relates to a varnish prepared from the masterblend disclosed herein.

Another aspect relates to a prepreg prepared from the varnish disclosed herein.

Another aspect relates to an electrical laminate prepared from the varnish disclosed herein.

Another aspect relates to a printed circuit board prepared from the varnish disclosed herein.

Another aspect relates to a coating prepared from the varnish disclosed herein.

Another aspect relates to a composite prepared from the varnish disclosed herein.

Another aspect relates to a casting prepared from the varnish disclosed herein.

Another aspect relates to an adhesive prepared from the varnish disclosed herein.

CLAIMS

What is claimed is:

1. A masterblend comprising:

a) a solvent selected from the group consisting of methyl ethyl ketone, acetone, Dowanol™ PM (mixture of 1-hydroxy-2-methoxypropane and 1-methoxy-2- hydroxypropane), cyclohexanone, Dowanol™ PMA (mixture of 1-acetoxy-2- methoxypropane and 1-methoxy-2-acetoxypropane), dimethylformamide (DMF), methyl isobutyl ketone (MIBK), xylene, toluene, methanol, and butanol and mixtures thereof; and

b) a core shell rubber

wherein the masterblend does not contain a thermosetting resin,

wherein said core shell rubber has a styrene butadiene core and a shell selected from the group consisting of a methyl methacrylate and an acrylonitrile, said styrene butadiene core does not swell in said solvent.

~~2. A masterblend in accordance with claim 1 wherein said solvent is selected from the group consisting of methyl ethyl ketone, acetone, Dowanol™ PM, cyclohexanone, Dowanol™ PMA, dimethylformamide, methyl isobutyl ketone, xylene, toluene, methanol, butanol, and combinations thereof.~~

~~3~~2. A masterblend in accordance with ~~any one of the preceding~~ claims 1 wherein said masterblend comprises from 5 weight percent to 40 weight percent core shell rubber, based on the total weight of the masterblend.

~~4~~3. A process comprising:

a) dispersing a core shell rubber in a solvent in a dispersion zone to form a masterblend; and

b) admixing the masterblend with a thermosetting resin to form a curable composition,

wherein the solvent is selected from the group consisting of methyl ethyl ketone, acetone, Dowanol™ PM (mixture of l-hydroxy-2-methoxypropane and l-methoxy-2- hydroxypropane), cyclohexanone, Dowanol™ PMA (mixture of l-acetoxy-2-methoxypropane and l-methoxy-2-acetoxypropane), dimethylformamide (DMF), methyl isobutyl ketone (MIBK), xylene, toluene, methanol, and butanol and mixtures thereof;

said core shell rubber has a styrene butadiene core and a shell selected from the group consisting of a methyl methacrylate and an acrylonitrile, said styrene butadiene core does not swell in said solvent.

~~5~~4. A process in accordance with claim ~~4~~3 wherein said dispersion zone comprises a high shear mixer capable of generating a power per unit mass of at least 0.5 W/Kg.

~~6~~5. A varnish prepared from the masterblend of claim 1.

~~7~~6. A prepreg prepared from the varnish of claim ~~6~~5.

~~8~~7. An electrical laminate prepared from the varnish of claim ~~6~~5.

~~9~~8. A printed circuit board prepared from the varnish of claim ~~6~~5.

~~10~~9. A coating prepared from the varnish of claim ~~6~~5.

~~11~~10. A composite prepared from the varnish of claim ~~6~~5.

~~12~~11. A casting prepared from the varnish of claim ~~6~~5.

~~13~~12. An adhesive prepared from the varnish of claim ~~8~~5.