**What is claimed is:**

1. A permeable spreading layer comprising:

hollow glass microspheres; and

a polymeric binder;

wherein the permeable spreading layer has high reflectivity and low density.

2. The permeable spreading layer of claim 1, wherein the polymeric binder comprises an emulsified polymer or copolymer with adhesive properties.

3. The permeable spreading layer of either of claims 1 or 2, wherein the hollow glass microspheres have a diameter from about 1 µm to about 100 µm.

4. The permeable spreading layer of any one of claims 1-3, wherein the polymeric spreading layer has a dry reflectivity of at least about 65%, at least about 70%, at least about 75%, at least about 80%, or at least about 85% and/or a wet reflectivity of at least about 50%, at least about 55%, at least about 60%, at least about 65%, at least about 70%, at least about 75%, or at least about 80%.

5. The permeable spreading layer of any one of claims 1-4, wherein the polymeric spreading layer has a density of less than about 1.0 g/cc, less than about 0.9 g/cc, less than about 0.85 g/cc, less than about 0.80 g/cc, less than about 0.75 g/cc, or less than about 0.7 g/cc.

6. The permeable spreading layer of any one of claims 1-5, wherein the polymeric spreading layer has an average void volume of about 10 percent to about 80 percent, about 20 percent to about 80 percent, about 30 percent to about 80 percent, or about 40 percent to about 80 percent.

7. The permeable spreading layer of any one of claims 1-6, wherein the hollow glass microspheres have a crush strength of at least 250 psi, have an average particle size of about 5 µm to 180 µm, and/ or a density of 0.15 g/cc to 0.83 g/cc.

8. The permeable spreading layer of any one of claims 1-7, wherein

the polymeric binder comprises between about 0.1-10 wt % of a polymer composition comprising one or more acrylic polymers, polyolefins, cellulose esters, cellulose acetate, cellulose triacetate, cellulose propionate, cellulose butyrate, cellulose acetate propionate, cellulose acetate butyrate, cellulose propionate butyrate, cyclic olefin copolymers, ethylene methyl acrylate copolymer, polycarbonate, polypropylene, polystyrene, styrene butadiene copolymers or blends, polyethylene, ethylene/propylene copolymer, ethylene-vinyl acetate (EVA), ethylene vinyl alcohol copolymer, polyvinylpyrrolidone, polyurethanes, poly(lactic acid), copolyesters, and mixtures thereof; and

the hollow glass microspheres are present at between about 1-80 wt %.

9. The permeable spreading layer of any one of claims 1-8, wherein

the polymeric binder comprises a polymer composition comprising one or more acrylic polymers, polyolefins, cellulose esters, cellulose acetate, cellulose triacetate, cellulose propionate, cellulose butyrate, cellulose acetate propionate, cellulose acetate butyrate, cellulose propionate butyrate, cyclic olefin copolymers, ethylene methyl acrylate copolymer, polycarbonate, polypropylene, polystyrene, styrene butadiene copolymers or blends, polyethylene, ethylene/propylene copolymer, ethylene-vinyl acetate (EVA), ethylene vinyl alcohol copolymer, polyvinylpyrrolidone, polyurethanes, poly(lactic acid), copolyesters, and mixtures thereof;

the hollow glass microspheres are present at between about 1-80 wt %; and

the pigment volume concentration (PVC) is between about 87% to 97%.

10. The permeable spreading layer of any one of claims 1-9, further comprising one or more buffers, wherein the buffers can comprise one or more acidic buffers, basic buffers or mixtures thereof, preferably bicine buffer or HEPES buffer.

11. The permeable spreading layer of any one of claims 1-10, further comprising one or more surfactants.

12. The permeable spreading layer of any one of claims 1-11, further comprising one or more plasticizers, preferably PEG.

13. The permeable spreading layer of any one of claims 1-12, further comprising one or more biocides.

14. The permeable spreading layer of any one of claims 1-13, further comprising one or more defoamer.

15. The permeable spreading layer of any one of claims 1-14, further comprising one or more voiding agents, preferably a pigment.

16. The permeable spreading layer of any one of claims 1-15, wherein the layer has a thickness of between about 100 µm to about 500 µm, or about 100 µm to about 400 µm or about 100 µm to about 300 µm.

17. The permeable spreading layer of any one of claims 1-16, wherein the spreading layer is isotropically porous.