coating that does not flake off. There is a need in the art for such articles, and methods of making such articles.

[0004] Coatings have been used in products, such as for enhancing the desirable features of rubber gloves. Previous coatings have been developed, such as those disclosed in U.S. Patent Nos. 4,548,844; 4,575,476; 6,242,042; 6,706,313; 7,179415; 6,772,443; 7,032,251; 6,706,836; 6,743,880; 7,019,067; 6,653,427; 6,828,399; 6,284,856; and 5,993,923, each of which is incorporated in its entirety as if set forth fully herein. All references cited herein are incorporated by reference in their entirety.

SUMMARY

[0004a] In one aspect of the present disclosure, there is provided a coated article comprising:

a coating composition comprising an emulsion;

wherein the emulsion comprises at least one water-soluble monomer and at least one water-insoluble monomer.

[0004b] In another aspect of the present disclosure, there is provided a method of making a coated rubber glove, comprising:

applying a coating material to a rubber glove formed upon a glove mold to result in an emulsion coated glove, the coating material comprising an emulsion having at least one water-soluble monomer and at least one water-insoluble monomer;

curing the emulsion coated glove on the glove mold at a temperature of between about 100°C to 160°C;

subjecting the emulsion coated glove to a leaching solution;

optionally dipping the emulsion coated glove in a slurry composition;

drying the emulsion coated glove; and

removing the coated glove from the glove mold to result in the coated rubber glove.

[0004c] In yet another aspect of the present disclosure, there is provided coating composition comprising:

at least one water-soluble monomer;

at least one water-insoluble monomer; and

one or more additional components selected from the group consisting of surfactant, stabilizer, and crosslinker.

[0004d] In a further aspect of the present disclosure, there is provided a method of making a coated latex glove, comprising:

forming a latex film on a glove mold;

dipping the latex film on the mold into a priming solution;

drying the latex film in an oven at a temperature between about 100°C to about 150°C for about 1 to about 2 minutes;

preparing a coating composition comprising a copolymer emulsion having at least one water-soluble monomer and at least one water-insoluble monomer;

applying the coating composition to the latex film on the mold to result in an emulsion coated glove;

curing the emulsion coated glove at a temperature of between about 100°C to about 160°C; and

removing the emulsion coated glove from the glove mold to result in the coated latex glove.

[0005] A novel and useful preparation of a copolymer emulsion is provided. In one embodiment, a method for forming a copolymer emulsion is provided by combining and copolymerizing at least one water soluble monomer and at least one water insoluble monomer, wherein the monomers used in the process are comprised of at least 50% by weight water soluble monomer and at least 10% by weight water insoluble monomer as measured by the total monomer weight.

[0006] In another embodiment, the method for the preparation of a copolymer emulsion is provided that includes concurrently combining a monomer feed and a pre-emulsion feed to form an emulsion, wherein the monomer feed comprises at least 50% by weight water soluble monomer based on the total monomer weight of the monomer feed and the pre-emulsion feed, and the pre-emulsion feed comprises at least 10% by weight water insoluble monomer based on the total monomer weight of the monomer feed and the pre-emulsion feed.