

ICEPHOBIC COATING AND COATED ARTICLES

ABSTRACT OF THE DISCLOSURE

Provided is an icephobic coating composition comprising an epoxy resin comprising poly(phenyl glycidyl ether)-co-formaldehyde and a curing agent; a fluoro-substituted poly(alkyl siloxane) resin; and a solvent mixture comprising a first solvent with Hansen solubility parameters of $14 \leq \delta_D \leq 17$, $6 \leq \delta_P \leq 13$, and $4 \leq \delta_H \leq 8$; and a second solvent with Hansen solubility parameters of $16 \leq \delta_D \leq 19$, $4 \leq \delta_P \leq 9$, and $11 \leq \delta_H \leq 15$. Further provided is a coated filter comprising a porous medium having an upstream surface and a downstream surface, in which at least the upstream surface has a coating formed from the coating composition. Coated articles and methods of forming coated articles and inhibiting ice formation also are described.

[Figure 1]