

Title (en)
ENVIRONMENTALLY FRIENDLY COMPOSITIONS HAVING ANTI-ICING, DEICING OR GRAFFITI PREVENTION PROPERTIES

Title (de)
UMWELTFREUNDLICHE ZUSAMMENSETZUNGEN MIT ENTEISUNGS-, VEREISUNGSSCHUTZ- ODER ANTI-GRAFFITI-EIGENSCHAFTEN

Title (fr)
COMPOSITIONS ECOLOGIQUES ANTIGIVRANTES, DEGIVRANTES ET ANTI-GRAFFITI

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Abstract (en)
[origin: WO0000568A1] The present invention describes an aqueous, non-electrolytic, non-toxic, biodegradable, continuous single phase liquid anti-icing or deicing composition for use on the surfaces of, for example, aircraft, airport pavements, roadways, walkways, bridges, entrances, structures, canals, locks, components, vessels, nautical component, railroad switches, and motor vehicles. The anti-icing or deicing composition comprises: (a) water; (b) a non-toxic freezing point depressant selected from the group consisting of monohydric alcohols having from 2 to 6 carbon atoms, polyhydric alcohols having 3 to 12 carbon atoms, monomethyl or ethyl ethers of polyhydric alcohols having from 3 to 12 atoms or mixtures thereof, wherein the freezing point depressant present is between about 14 to 60 percent by weight; (c) a thickener which is present in between about 0.01 and 10 percent by weight; and (d) optionally a corrosion inhibitor which is present in between about 0.01 and 0,1 percent by weight of the total composition. In one embodiment, the deicing composition further includes (e) a monohydric primary aliphatic unbranched alcohol as a means of forming a thin layer on the surface of the composition applied to the structure to be given ice protection, and/or as means of forming a homogenized foam with xanthan thickener; which alcohol is selected from the group consisting of alcohols having between 8 to 24 carbon atoms, preferably, 1-dodecanol. Compositions of water, propylene glycol, and/or propanol and xanthan are preferred. In other embodiments compositions preferably containing a polyol, such as glycerin, are used to produce a coating on an object or surface to protect it from graffiti such as paint, lacquer, ink and the like.

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