Title (en)

SEALING GLASS MODIFIER FOR USE WITH VOC-FREE OR LOW-VOC VEHICLE

Title (de)

VERSIEGELUNGSGLASMODIFIKATOR ZUR VERWENDUNG MIT EINEM TRÄGERMEDIUM, DASS KEINE ODER FAST KEINE FLÜCHTIGEN ORGANISCHEN VERBINDUNGEN ENTHÄLT

Title (fr)

MODIFICATEUR DE VERRE DE SCELLEMENT UTILISE AVEC UN VEHICULE NE CONTENANT PAS OU PRESQUE PAS DE COMPOSES ORGANIQUES VOLATILES

Publication

EP 0828693 A1 19980318 (EN)

Application

EP 97917762 A 19970401

Priority

- US 9705298 W 19970401
- US 62664096 A 19960402

Abstract (en)

[origin: WO9736836A1] A sealing glass modifier that decreases the chemical reduction of PbO in a PbO-containing sealing glass to metallic lead during sealing or firing, and enables the sealing glass to be used in combination with a VOC-free or low-VOC vehicle. The modifier preferably comprises an inorganic nitrate that is thermally stable at the temperatures at which the sealing glass frit seals the glass surfaces together, but that can be reduced to a lower oxidation state when exposed to the reducing conditions. The modifier is added to the sealing glass system in an amount sufficient to prevent the PbO from being chemically reduced when the sealing glass is fired in the presence of reducing conditions at a temperature sufficient to seal the glass. Particularly preferred modifiers are Bi(NO3)3.5H2O and/or Zn(NO3)2.6H2O. The modifier may be incorporated as a component of the sealing glass. Alternatively, the modifier may be dissolved or dispersed in the vehicle.

IPC 1-7

C03C 8/16; C03C 8/24

IPC 8 full level

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CPC (source: EP KR)

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