

The invention relates to glass enamels for protection from oxidation of sheet mild steel and may be used at manufacturing of consumer goods. A proposed low-component frit comprises non-deficient non-toxic oxides: SiO_2 , B_2O_3 , Na_2O , K_2O , CaO and Al_2O_3 , wherein copper oxide is introduced as adhesion activator. The frit is prepared according to the traditional technology of enamel frit preparation, comprising burdening of raw materials and cooking of the frit in corundum crucibles at the temperature of 1250°C during 1 hour. Frit grinding was carried out in vibrating mill with simultaneous humidifying of particles thereof with polysiloxanes. The size of frit particles after grinding was within the range of $10\text{--}70\text{ }\mu\text{m}$. Coverings made from powders of undercoat enamel frits are plated by electrostatic method, according to the traditional technology, on samples with thickness of 1 mm made from steel 08 KП followed by burning in the electric muffle furnace.