METHOD OF PREPARATION OF COATINGS

By

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METHOD OF PREPARATION OF COATINGS

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A method is known for obtaining coatings on metal on the basis of organic dispersions of polymers containing fluorine. However, the use of fluorine rubber as a film-forming agent is not known.

The proposed method is different in the respect that as a film-forming polymer one used fluorine rubber SKF-32. This enables one to broaden the assortment of polymers applicable as coatings.

In accomplishing the method the elastomer SKF-32 is dispersed through an organic medium which consists of a disperser and a diluter. As dispersers one uses aliphatic and aromatic ketones and esters. As diluters one uses aromatic hydrocarbons or their mixtures with aliphatics.

Example—Through swelling at normal temperature one prepares a gel of a polymer containing fluorine in a mixture of a disperser and a diluent. Afterwards the gel is broken down by a stirrer which has more than 1,000 rpm. One obtains an organic dispersion which one uses as a base of nonpigmented and pigmented varnish and paint compositions.

Paint and varnish compositions prepared in accordance with the following re-
Cipes (weight in %) have a viscosity (per VZ-4) of 30–40 sec and possess satisfactory

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
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<tbody>
<tr>
<td>Elastomer SKF-32</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>25</td>
<td>—</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Amyl acetate</td>
<td>—</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Toluol</td>
<td>50</td>
<td>60</td>
<td>60</td>
<td>56</td>
</tr>
<tr>
<td>Peroxide of Benzoyl</td>
<td>—</td>
<td>—</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Zinc oxide</td>
<td>—</td>
<td>—</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Iron ocher</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>5</td>
</tr>
</tbody>
</table>

factory stability.

The dispersions obtained in accordance with the recipes a and b when applied to a service by spraying, with the hand, or pouring on, and after their drying at room temperature give semitransparent protecting films. Insoluble and pigmented coatings are obtained in accordance with the recipes c and d. The drying is done at 140° during one hour.

Coverings for metals (2–3 layers) have satisfactory adhesion. They possess a heightened atmosphere-resistance and a resistance to corrosive media (mineral acids, oxidizers, gasoline, mineral oils, etc.).

Object of the Invention

A method of obtaining coatings on metal on the basis of organic dispersion of polymers containing fluorine which is distinguished by the fact that for the purpose of expanding the assortment of applicable polymers one uses for the latter fluorine rubber SKF-32.