

Conclusion. From the above analysis, we can understand that amplitude modulation is a process of shifting a low frequency modulating signal into the sideband of a high frequency carrier. Obviously, in AM waves, the carrier does not contain any useful information. Information is only included in the sidebands.

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STUDY WETTING ACTIVITY SILICONES IN THE PRESENCE OF SURFACTANTS

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The influence of surfactant (technical product «Dispersant Telaz D») on the wetting of metal substrates with a silicon solution. It is shown that the surfactant improves the wetting of the metallic substrate wetting ability, and silicone fluids are closely correlated with their dispersant activity.

Silicone lacquer paint materials historically occupy a significant market share of coatings. Their quality of coatings depends largely on the degree of dispersion of their component pigments. Effective process for dispersing pigments, a great importance is the ability of the pigmented particles wetted com-

ponents of the liquid dispersion medium. The purpose was to study the effect of surfactants (hereinafter SAS) wetting metallopigment. As the surfactant used technical condensation product of vegetable oils with diamines under the trademark «Dispersant Telaz D» (molecular weight – 2121 amu; amine number (HCl mg/g) – 32), the manufacturer of «Av-toninvest», Russia.

It has been established that the layer was formed on an aluminum substrate with toluene at the boundary with the water is hydrophobic, the contact angle is equal to 116,3°. In contrast, the interfacial layer, which was formed in the presence of surfactants, had a completely different surface properties (possessed significantly lower hydrophobicity). Since the introduction of surfactant in toluene, water contact angles of metals decreased by 12–15°. With the introduction of surfactant in dilute solutions of resin content (10% silicones), water contact angles decreased by 8–12°. Change in the interaction with the surface of the pigment wetting liquid, as a result of adsorption of surfactants, can be determined by changing the values of «relative work of wetting». In assessing this parameter is set, that the introduction of surfactant is increased wetting of metal substrates solutions silicones. Established patterns of change in the wetting activity are closely correlated with changes in patterns of dispersion metallopigment.

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CHARACTERES OF TWO COMPONENT CRYSTALOPTICAL SYSTEMS

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An analysis and synthesis of difficult optical elements from anisotropic crystals are of interest for the construction of laser measuring devices. Thus there is a task of development of methodology of calculation of such elements, that more precisely would describe their properties on passing and interference of hertzian waves. The co-version method of Ph. I (is known). Fyodor for the calculation of distribution of electro-magnetic waves in anisotropic environments. However this method results in difficult general expressions, and his use for ДКЭ is difficult. On the whole a task is not accessible to the strict analytical decision, thus basic difficulty is; in the necessity to take into account out-of-parallelism of wave vector to $k = 2\pi/\lambda$, describing transfer of phase of wave, and radial vector $\vec{s} = [\vec{E}, \vec{H}]$, describing transfer of energy of wave (λ – the length of wave, E, H – vectors of interesting of elliptic and magnetic fields).