KHẢO SÁT KHẢ NĂNG GIA CƯỜNG CỦA SÉT HỮU CƠ TỪ BENTONITE (PROLABO – PHÁP VÀ BÌNH THUẬN – VIỆT NAM) ĐẾN MỘT SỐ TÍNH CHẤT CƠ LÝ CỦA MÀNG PHỦ EPOXY

Phạm Thị Hà Thanh, Ngô Kế Thế, Nghiêm Xuân Thung, Trần Thị Tư Hà

TÓM TẮT:

Organoclay synthetized from bentonite (Prolabo - France and Binh Thuan - Vietnam) and dimetyldioctadecylamoni chloride was investigated by methods like XRD, TGA and SEM. The results showed that the d001 value at 2 angles was 38.651 Å (for bentonite Prolabo - France) and 39.239 Å (bentonite Binh Thuan - Vietnam), both of which increased significantly compared to the initial bentonite and created favorable conditions for the polymer chain to be inserted between the clay layers. With 1% clay content of prepared organic clay, the epoxy has fully earned the best properties such as bending strength, impact resistance, adhesion, abrasion resistance. Especially the hardness, heat resistance of the coating increased respectively 1.39 times, 130C (for organic clay prepared from bentonite France) and 1.49 times; 12.50C (organic clay with bentonite prepared from Binh Thuan - Vietnam) compared to the samples of epoxy that hadn't reinforced yet.