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**The Action of Marine Climate on Some Polymers** MARIANA CORNELIA BUTNARU, Weapons Factory, CUGIR — This article presents some studies referring to the structural changes of some polymers due to the action of marine climate. The marine climate refers to seas, oceans and lands under the action of sea weather. So, the marine climate can be extreme cold, tropical or extreme cold and tropical. In the marine climate, dust, radiation, sand and salt fog have important effects of medium on which the produces are exposed when they are stored, used or transported. The wind increases these effects. However, one of the most important effects, is the effect of humidity. For measurements we have selected those materials which are often aging by climatic factors like humidity, could, warm, dust and sand, radiations. We present the measurements and the results for PN50, PN70, PN80 elastomer rubbers used for gaskets resistant at oil environments. First the structure of the elastomers was analysed (IR measurements) with a spectrometer Equinox-55. Then, the samples were exposed on Agigea Station according to a test program. When we study the intermolecular process, an important role has the double link. The configuration of the double link relating to the position in the main chain in the lateraly groups, influence the oxidative process. Due to the marine climate, appear a lot of changes on the structure of polymers.

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