

3rd International Conference and Exhibition on Materials Science & Engineering

October 06-08, 2014 Hilton San Antonio Airport, USA

Change of the physical properties of colored high density polyethethylene by effect of environment

K E Shady and F M Tera National Institute for Standards Giza, Egypt

This study deals with the environment and different liquid environments effect on bath the color fastness and the mechanical properties - expressed as tensile strength and elongation - of colored high density polyethylene polymer in net form, used for warning and as an indicator for the undo ground pipes passage. It was found that withering affects the tensile strength and the elongation considerably, while change on temperature of the surroundings was of less effect. Also, environment liquids caused a small loss in tensile strength of about (6%) while the samples in extended percent or about (22%) was observed. Both parameters were showed an appreciable change at damped soiling mud.

The light fastness of the examined polymer samples were greatly affected by weathering conditions, while the other factors did not affect the light fastness considerably.

Biography

K E Shady has completed his PhD at the age of 28 years from Helowan University. He was head of art department at Tabuk Teachers College_KSA head of technical committee for-weaving at Saudi Arabian Standards Organization. He has published mor than 25 papers in several journals.

shadykamals@yahoo.com