

„Folia” w płynie – Powłoki barierowe BIM BA do papieru i tektury Alternatywa dla powłok polietylenowych

BIM BA Barrier Coatings for paper and board – alternative solution to the Polyethylene film

Every minute, the equivalent of one full garbage truck of plastic trash is dumped in the sea. That is 1440 trucks per 24 hours and 8 millions tons per year.

More and more plastic is floating in our oceans and seas. It comes from rubbish that we throw away on the street, fishnets that are discarded, and from washing synthetic clothing and mostly plastic packaging of all kinds. All these different types of plastic together form the plastic soup in the seas and oceans.

Over time, plastic falls apart into small fragments, transforming all the water around us into a big soup full of microplastics. These particles enter the marine food chain because plankton and other small animals mistake them for food.



The oceans constitute 72% of the earth's surface and are our primary oxygen suppliers. The oceans are the main source of food for more than half the world's population.

The plastic pollution of the seawater has also a serious influence on our health. Most of the pollution by far comes from land. At least 80% of the plastic rubbish in the oceans are dumped by industry and by people on land. It is carried to sea by rivers, canals, harbors and the wind.

The estimated size the plastic waste in the oceans 700,000 square kilometers (more than the area of Poland) to more than 15,000,000 square kilometers (about the size of Russia). Exact measures of the size are difficult as the plastic soup cannot be detected from the aircraft or satel-

lite – most of the particles float just under the surface of the water and have various sizes.

The European Commission wants to reduce single-use plastics and make manufacturers responsible for the waste phase of their products.

Strategy of BIM Kemi

Plastic is prolific in all types of packaging, as an extruded barrier LDPE (Low Density Polyethylene) layer, and LDPE film wrap or lid, or as a HDPE (high density polyethylene) rigid carton. Only now are we coming to realize the problem with these materials.

BIM's green chemistry is designed to eliminate the need for plastic in all types of packaging from food to cosmetics, while making recycling and fiber reclamation easier and economical.... Enabling the recovery and re-use of our resources.

We help the pulp and paper industry to develop new and long term sustainable products with high quality and minimal impact on people and environment.

■ The problem with the LDPE extruded plastic films

- Most widely used barrier methods in packaging today by a long way. Either extruded onto a paper and board substrate or as a film wrap/lidding material
- Formidable barrier, water resistance, O₂ and moisture barrier, grease barrier. Dependent on degree of barrier required typical film weights vary from 6 g/m² to 18 g/m². Suitable for direct food contact.
- Difficult to recycle and recover fibre economically, leading to most PE extruded waste going to land fill or incineration
- Persists in the environment – LDPE takes 500-1000 years to regrade