

Starch based Biodegradable Plastic

GS BP Starch

Recently, destroying ecology and environmental by plastic pollution is getting severe in the world and especially microplastic problem in the marine environment is becoming a devastating issue. At the moment, it is said that over 150 million tons of plastic garbage exists in the ocean. At the year 2010, 8 million tons of plastic garbage flowed into the ocean and it is 9.1 million tons at 2015 and keep increasing. It is predicted that the amount of plastic garbage may become 850 - 950 million tons by 2015 whereas the amount of fish will be 812 - 899 millions tons so that amount of garbage will be more than that of fish in the world. There are some scientific report that these microplastic is already in our human body which should had come from our surrounding environment. Therefore, plastic recycling, reduction of plastic usage itself and biodegradable plastic usage and development, have been intensively attempted and carried out. In this regard, we have successfully made starch based biodegradable plastic. Some grades are composed of 100 % nature biomass derived materials. This means that we had succeeded in making other ingredients besides starch, also derived from nature.

We will also measure other mechanical strength and other thermal properties later and update here. We will also test biodegradability in the soil and ocean in order to obtain biodegradable certificate from Japan and USA, Europe.

Tensile strength : 4 - 9 MPa

