

## **Plant based Biodegradable Resin**      wood, wood waste, bamboo, any kind of plant as raw material **100 % nature derived material, no petroleum**

### **GS BR Plant**

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. It is predicted that the amount of plastic garbage will be more than that of fish in the world by 2050. 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 plant based biodegradable plastic. Some grades are composed of 100 % nature derived materials. We can use wood, wood waste, bamboo, any kind of plant as raw material. By using this material, we can promote recycling. We are cling to the idea of creating biodegradable material as harmless as possible to the environment. On top of that, we can make nano cellulose composite with this material since we have nano cellulose composite technology.

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



# **GS** TECHNICAL INFORMATION

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Tensile strength : 30 - 33 MPa (PHBV type)



No. 1152



No. 405