



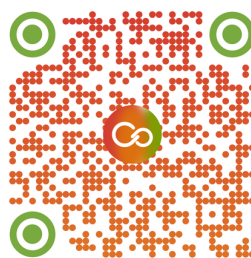
**Make the
right moves
towards sustainability**

CIRCULAR

Toys and Games

More than 80% of the toys and games are currently made with plastics, due to versatility, lightweight and its affordability. However, making toys and games with plastics increase CO2 emissions & depletes resources. Wood, that is commonly used to make toys and games are not truly circular, having limitations with its applications and durability.

Using biocomposites made from crop-residue & fast-renewables for toys & games offers benefits of plastics at a significantly better environment footprint. They are ideal circular solution, from design to its end of life.

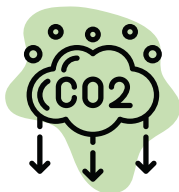


Scan or click here

MANY BENEFITS

REDUCE CO2

Biocomposites enable biogenic carbon to be locked in the products. They are made with repurposed material & recycled after use,



CONSERVE RESOURCES

Replacing fossil resources with crop-residue & fast-renewables enable us to conserve limited resources available.



HIGH QUALITY & SAFETY

Free from toxic chemicals such as melamine, formaldehyde & BPA. Grades are available with EN-71, toys & games safety certificates.



GREAT LOOK & FEEL

Natural fibers visible on the surface of the products provide earthy look. Haptics of the products have natural appeal.



END TO END SERVICE

MATERIAL SUPPORT

We support you with material selection & new material development

PROCESS SUPPORT

We support you with moulding & processing of material at your site

PRODUCT SUPPORT

Product development and manufacturing support for your diverse needs

LCA SUPPORT

Proprietary technology to track your product sustainability footprint



OUR BIOCOMPOSITES

Material Family	Bio Content (%)	Recycle Content (%)	Binder	Tensile Strength (MPa)	Flexural Modulus (GPa)	Elongation (%)	Notched Impact (KJ/M2)	HDT (@ 0.46 MPA, Deg C)	Density	Mold Shrinkage %	Remarks
BioDur - S	20 - 90	0 - 80	Recycled, fossil or bio-based	30 - 60	2.0 - 5.0	2.0 - 6.0	2.5 - 5.0	120 - 155	0.94 - 1.1	0.6 - 1.0	Standard stiffness applications
BioDur - I	20 - 80	0 - 70	Recycled, fossil or bio-based	20 - 40	0.8 - 2.0	4.0 - 15.0	5 - 25	110 - 145	0.94 - 1.1	0.6 - 1.0	Flexible & high impact applications
BioPur - B	40 - 100	-	Fossil or bio-based	10 - 40	0.1 - 4.5	1.5 - 500	4.0 - 24	70 - 130	1.25 - 1.35	< 0.1	Fibers, starch & compostable binders
BioPur - M	20 - 70	-	Fossil or bio-based	14 - 50	0.1 - 4.0	6 - 500	4.0 - 24	70 - 130	1.3 - 1.4	< 0.1	Minerals & compostable binders
BioPur - N	20 - 80	-	Fossil or bio-based	20 - 50	0.4 - 3.0	25 - 550	11 - 55	60 - 80	1.24 - 1.26	< 0.1	Blend of compostable binders

BioDur products are recyclable and BioPur products are compostable at the end of their use. We have more than 1000 grades to choose from. If your product & process needs are unique, we can customize colour, fiber choice (bamboo, husk, wood, starch, etc.), fiber visibility (high, medium, low), MFI & properties.