

QILIN

COQUILLAGE / SHELL

Augmented Natural Material

Authentic Material est concepteur et fabricant de matériaux à partir des ressources naturelles inexploitées de ses clients. Authentic Material crée le matériau de leurs histoires, au service de la transition écologique et du design.

La gamme QILIN : 50% matière naturelle recyclée, 50% de polymère biosourcé.

Disponible en plusieurs grades de souplesse/rigidité, cette gamme recyclable atteint un degré de naturalité élevée. Le QILIN, délivré sous forme de granules compatibles avec les technologies classiques de la plasturgie, est une alternative aux matériaux issus de la pétrochimie pour des applications industrielles.

Designer and manufacturer of materials from discarded natural resources of our customers. At the service of ecological transition and design, Authentic Material creates the material of their story.

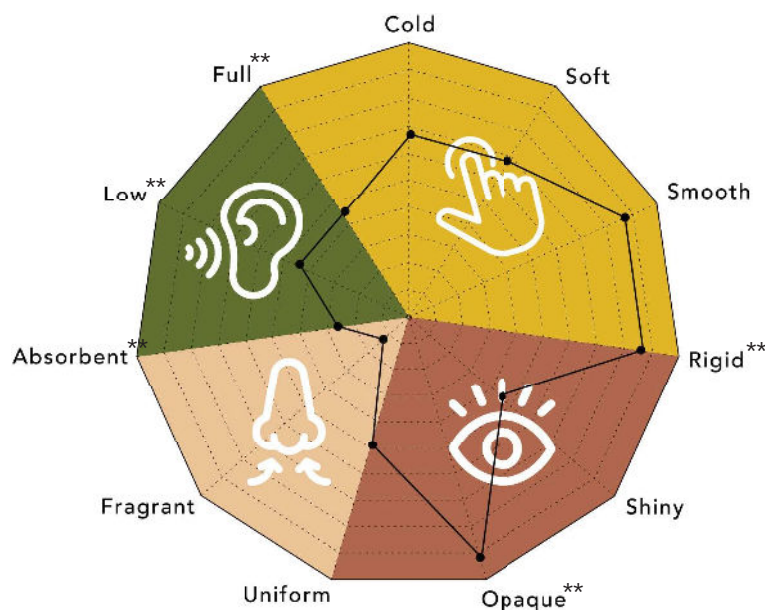
The QILIN range: 50% recycled natural material, 50% biosourced polymer.

Available in several grades of flexibility/rigidity, this recyclable range achieves a high degree of naturality. The QILIN, delivered in the form of pellets compatible with classic plastics processes, is an alternative to petrochemicals materials for industrial applications.

FIELD OF APPLICATIONS



SENSORY PROFILE *



* Sensory profile made on rigid formulation.

** Data can change between different pourcentage of natural origin .

MATERIAL



NCS S 4010-Y10R

Natural Color System is a universal coloring standard.

COLORING



Color depends on sourced raw materials.
For more choices, contact Authentic Material.

MATERIAL PROPERTIES

	Mechanical properties										Physical properties					
	Tensile strength MPa	Yield strength MPa	Elongation (%)	Modulus GPa	Flexural modulus GPa	Charpy impact Unnotched ISO 179 (kJ/m²)	Stress @ break MPa	Strain @ break (%)	Density (g/cm³)	Hardness shore D ISO 868	Content of natural origin (%)	Thermal stability			Shrinkage at 1 year ISO 294-4	
												Temperature °C	Weight loss (%)	Color change	Length	Width
Semi- Rigid	92,8	IP	IP	1,70	NA	NA	NA	No Fracture	IP	IP	IP	0,65	6,93	1,33	1,20	
Rigid	100	<100 HV0,1 abt. 130	1,47	0,50	87	3,2	3,10	14,92	47	1020	6	0,09	7,67	3,33	0,60	

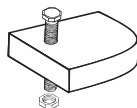
	Absorption capacity ISO 62		UV Resistance	HDT	Climatic Room
	Weight loss (%)	Thickness modification (%)			
Semi-Rigid	IP	IP	Delta E =2,6 <4 no color change	IP	IP
Rigid	<0,02	<1	Delta E =3,4 <4 no color change	IP	IP

NA : Not Applicable
IP : In Progress
HDT : Heat Deflection Temperature

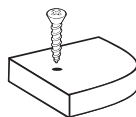
ASSEMBLY MACHINING



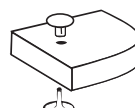
Gluing



Bolting

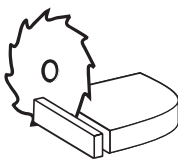


Screwing

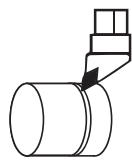


Riveting

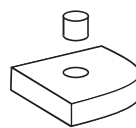
OCCASIONAL MACHINING



Sawing

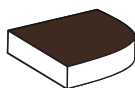


Tourning
(only rigid material)

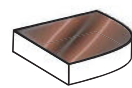


Drilling

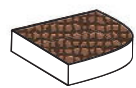
FINISHING POSSIBILITIES *(with a mold)*



Coating

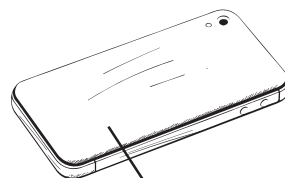
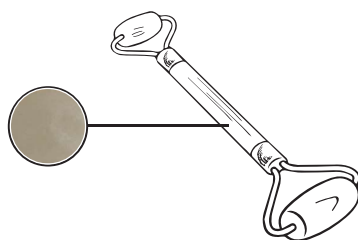


Polishing



Texturing

EXAMPLES



PROCESSING TECHNOLOGIES



Thermopressing



Calendering



Injection molding



Thermoforming