A.D. COMPOUND
Plastic Material Processing

ADFIL®

Wood plastic composite
Fiber wood filled

Bio Based material recycled and recyclable

UL VALIDATED
• ADFIL#013NOAKGD00 CONTAINS 30% BIOBASED CONTENT
UL.COM/ECV

Ed. 10/2020

ADFIL®

AESTHETIC WOOD FIBER COMPOUND

VALIDATED

- ADFIL#O13NOAKGD00 CONTAINS 30% BIOBASED CONTENT

UL.COM/ECV

RECYCLABILITY

ADFIL® is a **Bio Based** material 100% recycled and recyclable.

BIO BASED COMPOUND

RE-USE: It's easy to use internal scraps regrinded or regranulated.

RE-CYCLE: The recycling is currently based on the legislation of plastic materials.

INJECTION MOULDING

ADFIL® is a special material for a special application. **To achieve the goal it is crucial to start with a good machine configuration.**

- Drying temperature 90 - 120 °C
- Drying time 4 - 8 hours
- Mould temperature 70 - 80 °C
- Melt temperature 190 °C
- Temperature settings 180 >>190 °C
- Inlet zone 180 °C
- Zone 185 °C
- Zone 190 °C
- Nozzle 190 °C
- Screw type: without color mixer, transport only
- Back pressure high
- Decompression 3 mm
- Injection speed medium/low
- Holding time 30 s
- Set cooling time 20 s
- Avoid: gasses/water

APPLICATION

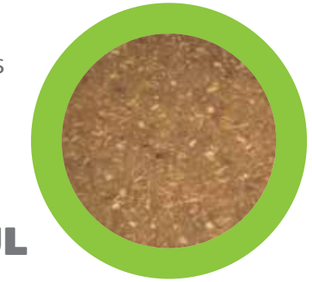
ADFIL® can be used for various applications indoor and outdoor.

*Colours are only indicative**

TECHNICAL

INFO

ADFIL® is a wood plastic composite, made by recycled raw materials; it has a great tenacity, a good tensile module and is UV and thermal stabilized.



INVISIBLE WITH X-RAYS

THE AESTHETIC EFFECT IS WONDERFUL

PHYSICAL	METHODS	UNIT	RANGE VALUE
MFI (E) 230 °C/2,16 Kg - [WPC]	IDO.08.00.LAB	g/10 min	8,0 ÷ 14,0
MFI (E2) 190 °C/10 Kg - [WPC]	IDO.08.00.LAB	g/10 min	20,0 ÷ 50,0
DENSITY 23 °C	ISO 1183	g/cm³	1,04 ÷ 1,10
RESIDUAL MOISTURE	IDO.18.00.LAB	%	<= 1,50
XRF	IDO.13.00.LAB		CONFORM
XRF TEST Cr	IDO.13.00.LAB	mg/kg	0 ÷ 80
XRF TEST Br	IDO.13.00.LAB	mg/kg	0 ÷ 80
XRF TEST Cd	IDO.13.00.LAB	mg/kg	0 ÷ 32
XRF TEST Sb	IDO.13.00.LAB	mg/kg	0 ÷ 160
XRF TEST Hg	IDO.13.00.LAB	mg/kg	0,0 ÷ 0,5
XRF TEST Pb	IDO.13.00.LAB	mg/kg	0 ÷ 60
XRF TEST Cl	IDO.13.00.LAB	mg/kg	0 ÷ 2000

MECHANICAL	METHODS	UNIT	RANGE VALUE
FLEXURAL MODULUS (+23 °C 1mm/min)	ISO 178	MPa	3000 ÷ 4000
TENSILE MODULUS (+23 °C 1mm/min)	ISO 527	MPa	3200 ÷ 4200
TENSILE STRENGTH AT YIELD (+23 °C)	ISO 527	MPa	35,0 ÷ 45,0
ELONGATION AT YIELD (+23 °C)	ISO 527	%	1,9 ÷ 2,5

PROCESSABILITY

ADFIL® is the best in color changing.

ONLY FEW SHOTS TO NEXT COLOR EASY ALSO FROM BLACK TO WHITE DURING MOLDING

IMPACT	METHODS	UNIT	RANGE VALUE
CHARPY IMPACT STRENGTH, NOTCHED (+23 °C)	ISO 179/A E 1	kJ/m^2	3,00 ÷ 5,00

INTERNAL	METHODS	UNIT	RANGE VALUE
LIGHT FASTNESS	INTERNAL	kLy	>=300

OTHER	METHODS	UNIT	RANGE VALUE
L* (COLOR) (D65)	D65		79,55
a* (COLOR) (D65)	D65		3,00
b* (COLOR) (D65)	D65		8,09
DELTA E (COLOR)	D65		0,00 ÷ 2,20
RECYCLE PLASTIC CONTENT	IOS-MAT 77-4	%	>= 53
WOOD CONTENT	IOS-MAT 94-2	%	>= 35

PROCESSING CONDITIONS	VALUE
DRYING TEMPERATURE (°C)	90 - 120
DRYING TIME (h)	4 - 8
BARREL TEMPERATURE (°C)	180 - 190

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