

# "RevPU"

## Best Replacement for conventional PU leather

New & affordable choice for sustainable living

BEST REPLACEMENT FOR PU LEATHER

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# ABOUT "RevPU"



REVPU - NEW & AFFORDABLE ECO PU LEATHER

What is RevPU?

How to make RevPU?

Why better than waterborne PU/DMF-free PU, conventional PU & PVC?

What is the application?

How to kickstart your programme?

**THINGS TO COVER**

**02**



# What is RevPU

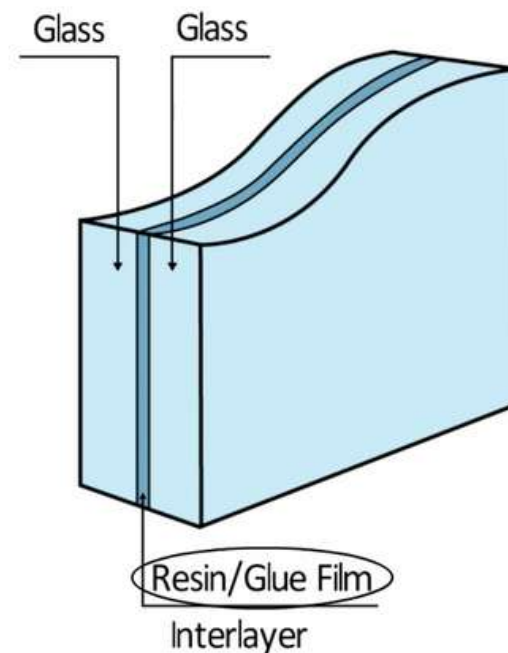
## PVB

There is an invisible layer of PVB resin in windshields, which provides safety during an accident, but it is also what makes windshields recycling challenging

PVB is Polyvinyl Butyral, a polymeric material with three different functional groups. Its unique structure provides versatility for wide applications, and it is the best alternative to PVC

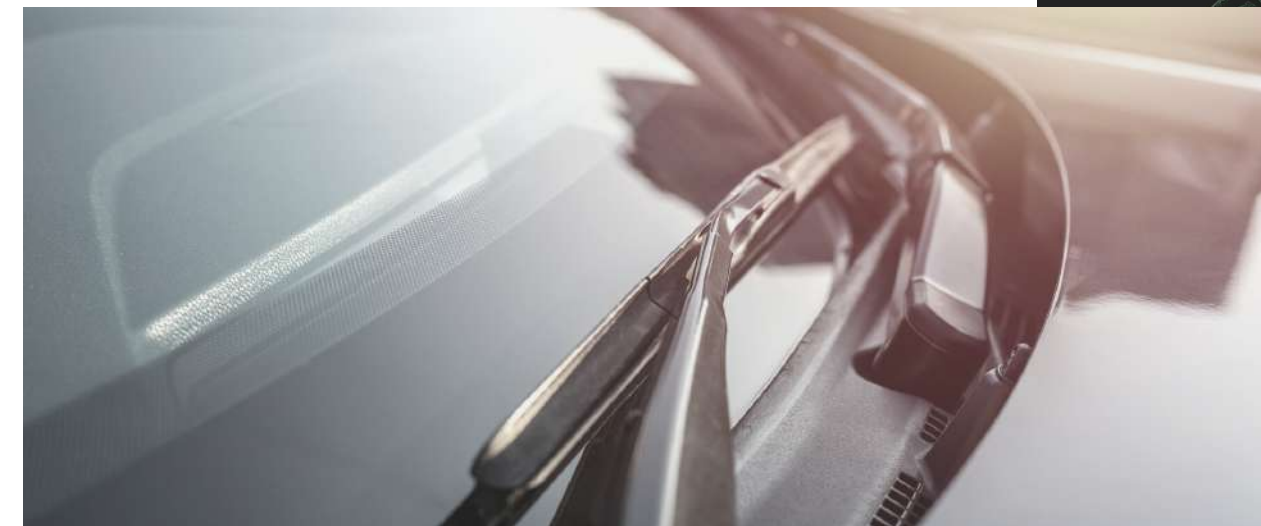
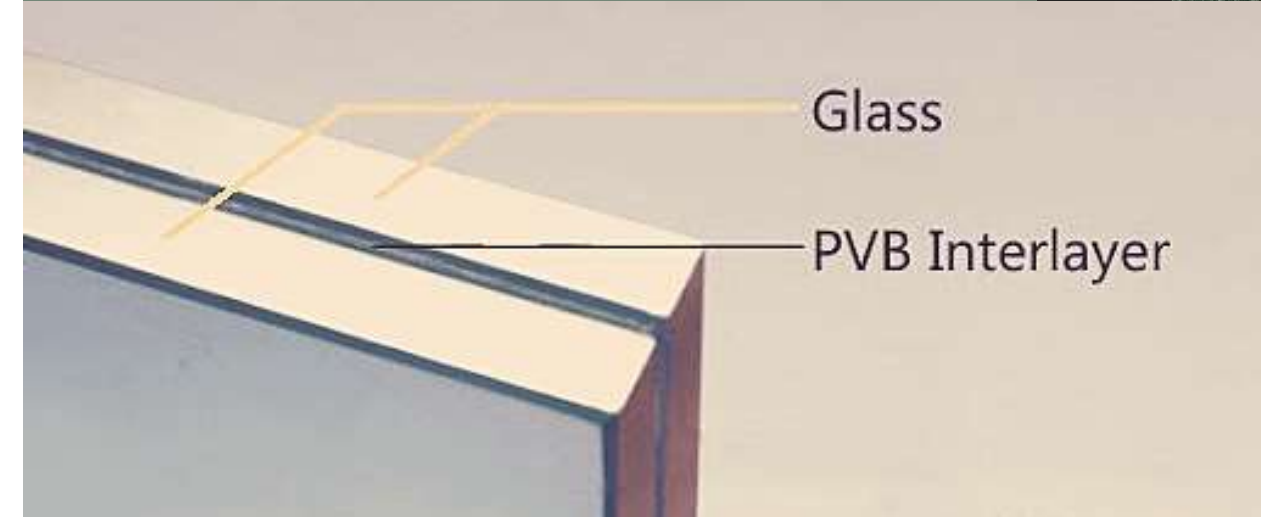
## rPVB

By the processes of separation, purification, and modification, recycled PVB could be converted into finished materials, including pellets, adhesives, treatment agents, and coating resins. And then through further manufacturing, various soft films, coated yarns, and foaming materials are made



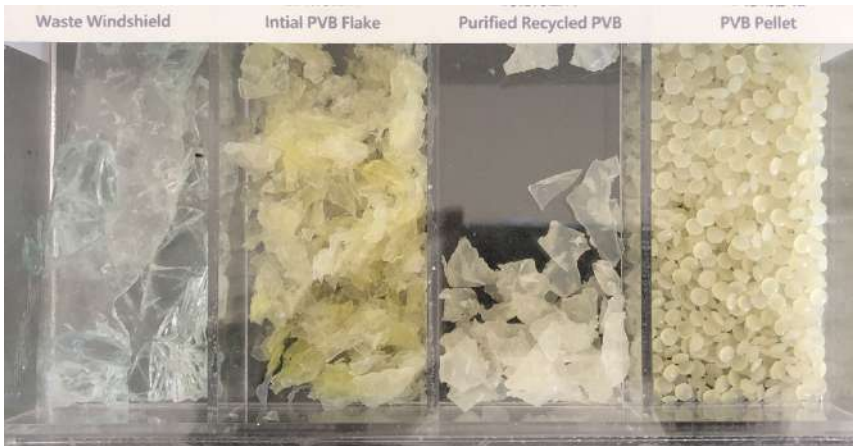
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# CIRCULAR LOOP ECONOMY



REVPVU - NEW & AFFORDABLE ECO PU LEATHER





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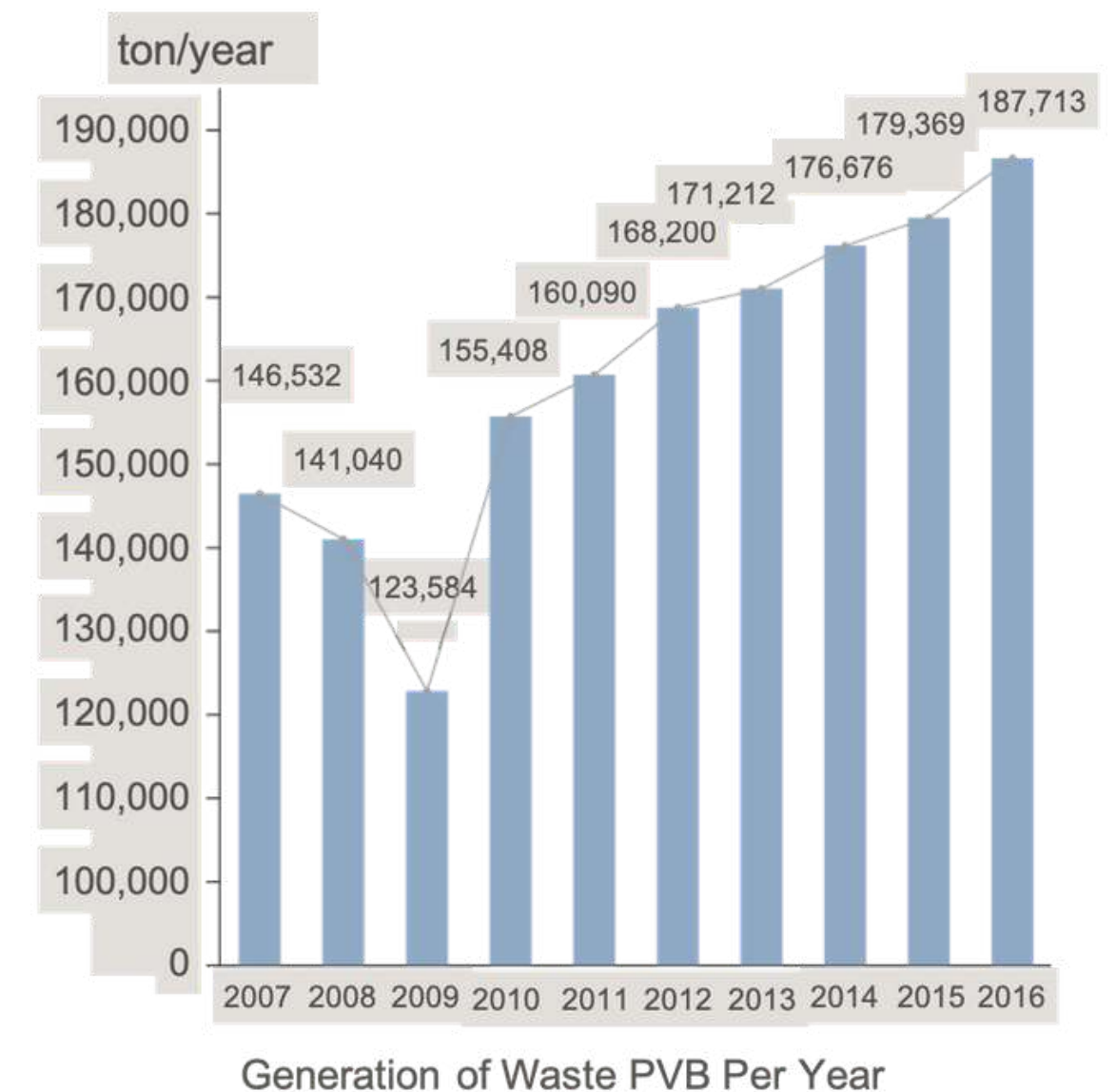
# Reality Check

## Facts about RevPU (rPVB)

**18,000 tons of  
PVB waste  
annually**

**RevPU contains >  
60-90% recycled  
PVB (rPVB)**

Amount of Waste PVB		
Vehicle Yield Worldwide	1,000,000,000	
Scrapped Vehicle Monthly	80,000,000	
Waste PVB Generation Each Car	1~2	kg
Waste PVB Generation Monthly	18,000	ton

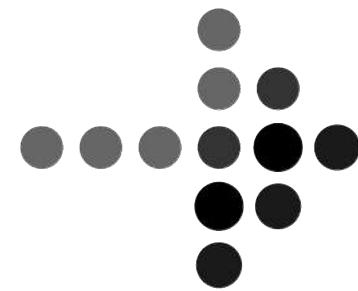


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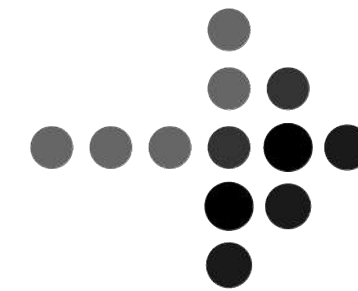
# Rev PU - Eco Benefits

Facts about RevPU (rPVB)

1 KG rPVB



**REDUCE**  
17 kg Co<sub>2</sub>



**SAVE**  
53 kg H<sub>2</sub>O

DMF-free

Water Solvent

PVC-free

>80%  
rPVB

Circular  
Economy

Reduce  
Co<sub>2</sub>  
emission

Reduce  
H<sub>2</sub>O  
use

# Comparison 1

Comparison  
between Various  
Artificial Leathers:

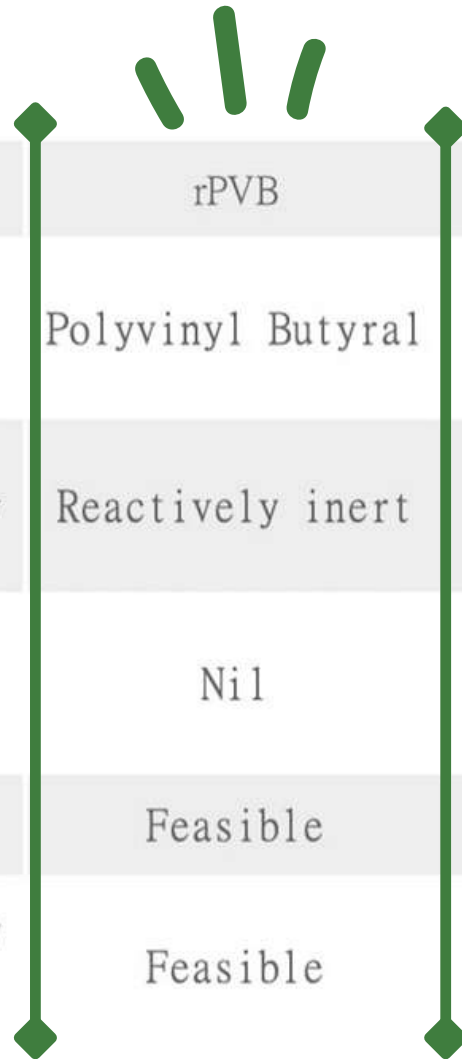
Item		rPVB	PVC	PU	TPU
Chemical Property	Chemical Composition	Polyvinyl Butyral	Polyvinyl Chloride	Polyurethane	Thermoplastic Polyurethane
	Weatherability	Chemical Stability	Chemical Stability	Tending towards Hydrolysis	Tending towards Hydrolysis
	Yellowing	5	5	3	4
Processibility	Process	Calendering	Calendering	Solution Coating	Film Coating
	High Frequency Process	Feasible	Feasible	Feasible	Feasible
	Printing	Feasible	Feasible	Feasible	Feasible
Physical Property	Anti-abrasiion	4	4	4	5
	Flexibility	3	4	4	5
	Softness	5	4	5	3
	Anti-scratch	5	4	4	5
Eco Assessment	Dioxin Contamination	Nil	Pollutant	Nil	Nil
	DMF Content	Nil	Nil	Trace	Nil
	Recycling Rate	Above 80%	Above 80%	Unrecycleable	Under 10%
	Eco Regulation	REACH	REACH (Costly)	REACH (Costly)	REACH

※ 「5」 is the best, and 「1」 is the worst



# Comparison 2

Comparison  
between Various  
Sheets:



Item	rPVB	PVC	TPU	EVA	TPE (SBS)
Chemical Composition	Polyvinyl Butyral	Polyvinyl Chloride	Thermoplastic Polyurethane	Ethylene Vinyl Acetate Copolymer	Styrenic Block Copolymer
Weatherability	Reactively inert	Reactively inert	Tending towards Hydrolysis	Reactively inert	Easily Degraded and Oxidized
Dioxin Contamination	Nil	Pollutant	Nil	Nil	Pollutant
Printablility	Feasible	Feasible	Feasible	Feasible	Not Easy
High Frequency Process	Feasible	Feasible	Feasible	Imfeasible	Imfeasible

※ 5 is the best, and 1 is the worst



# RevPU

- \*DMF-free, use water solvent**
- \*SVHC & REACH tested, PVC-free**
- \*60-80% Pre or Pro consumer rPVB waste**
- \*GRS certification**
- \*Each kg reduce 17kg Co2**
- \*Each kg reduce 53kg H2O**
- \*Abrasion & hydrolysis resistant**
- \*Soft & excellent weatherability**
- \*BEST replacement to conventional PU / PVC / recycled leather**



CU 1018563  
Certificated by Control  
Union Certifications BV

This product is made with recycled PVB, which is  
post-consumer and mostly derived from windshield  
of scrapped cars

## RevPU rPVB Advantages



### ECO Regulations

Conform to  
REACH, P-65,  
SVHC, DMF-free  
and FDA etc.



### Green Products

Products with  
loop economy  
model could meet  
requirements to  
niche market



### Alternative to PVC

Comply with  
PVC-free policy



### Corporate Social Responsibility

Fulfill CSR by  
promote green  
products



### Excellent Physical Properties

Incorporation of  
stable chemical  
properties make  
PVB suitable for  
outdoor products





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# Over 50 different colours/grains

**MOQ 500 yards (no stock available)**

**OEM colour & texture is welcome**

**Pre-production sample - 2-3 weeks**

**Bulk -4-6 weeks**

USD 6.4 - USD 8.0 per yard, depends on the order volume. Ex-factory China

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# OEM products e.g. Saffiano Pouch Size: 24 x 15.5 cm

**~ 80% recycled PVB**

**MOQ 500 yards / ~4000 x pouch**

**\* Retail fashion merchandise quality  
(not promotional premium quality)**

Approx. USD 3.70, depends on the product spec  
Ex-factory China

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# Upcycle Product Ideas

Furniture

Apparel, bags & shoes

Fashion accessories

Mobile accessories

Sports equipment





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**Brands,  
corporate,  
companies,  
shops, projects,  
influencers...**

**Time to switch to RevPU**

Be the leaders or participate in  
environmental protection



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# Eco Concepts

ECO ATTITUDE  
EQUAL RESPONSIBILITIES

✉ EMAIL : [MARKETING@ECOCONCEPTS.COM.HK](mailto:MARKETING@ECOCONCEPTS.COM.HK)  
🌐 WEBSITE: [WWW.ECOCONCEPTS.COM.HK](http://WWW.ECOCONCEPTS.COM.HK)

**Over 8 years experience**

Started producing PLA products since 2012

**Mission & passion**

Motivate brand owners, corporate, & more people to support environmental protection through providing wide selections of eco products