

ISA MATERIALS

Powered by
innovera™

™
ISA nextgenmaterials

x

 MODERN
MEADOW





innovera™

ALL IT TAKES IS ONE TOUCH.

INNOVERA™ is the transformative material crafted using plant-based proteins, biopolymers, and recycled rubber. Completely animal-free, it is masterfully engineered to replicate the look and feel of the collagen found in leather. INNOVERA™ supports a circular economy with recyclability and seamlessly integrates into traditional leather production.





ISA nextgenmaterials



MODERN
MEADOW

A Powerful Partnership for the Future of Materials

• Innovation Meets Heritage

ISA's expertise in leather finishing and Modern Meadow's bio-design technology come together to create **CORE, SILKY and FULL GRAIN | Powered by INNOVERA™**, new class of sustainable materials

• Crafting the Future of Materials

By combining ISA's craftsmanship with Modern Meadow's innovation, INNOVERA™ finished products are not only built to meet the highest standards of quality and sustainability, but also deliver the look and feel of genuine leather

• Shared Values

Both partners share a strong commitment to sustainability, offering a solution that supports circularity and reduces environmental impact

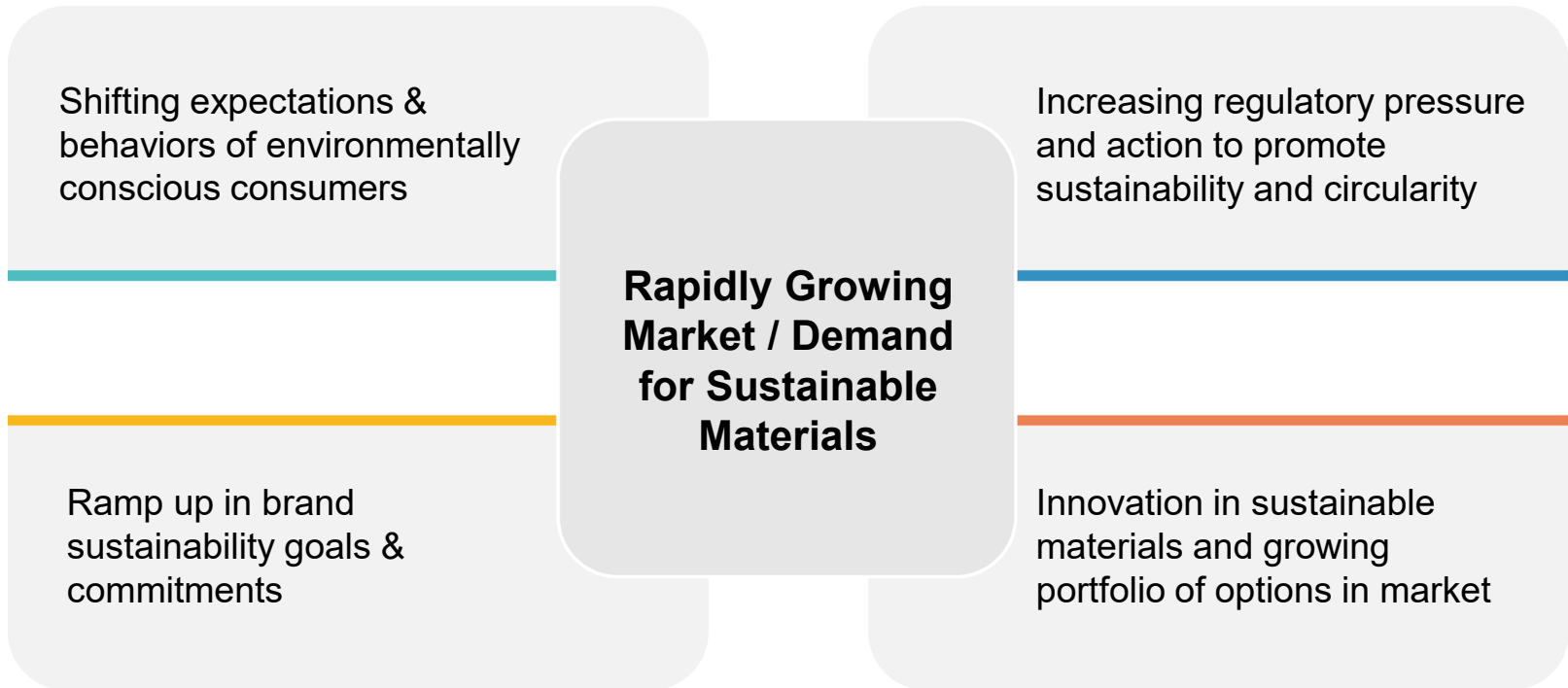


ISA nextgenmaterials

ISA INDUSTRIAL LTD. MACAU (CHINA) | USA | VIETNAM | CHINA | UK | HONG KONG (CHINA) www.isanextgenmaterials.com



MARKET CONTEXT



WHY INNOVERA™ MATTERS

INNOVERA™ is not just another material innovation, but also a solution designed for the future of fashion and design. As an innovative sustainable material, INNOVERA™ allows your brand to meet the growing demand for sustainable materials while maintaining the high standards of aesthetics, touch, and performance that your customers expect.

New Canvas for Designers



- Adaptable form and function
- Versatile crafting
- Precision detailing
- Customizable textures and finishes

Sustainable Luxury for Consumers



- Luxurious feel
- Durable and long-lasting
- Versatile and stylish
- More sustainable choice

ISA CORE

Powered by INNOVERA™



Tangerine



Red



Black



Shoes: Dark Brown, Black, Grey

ISA SILKY

Powered by INNOVERA™



ISA FULL GRAIN

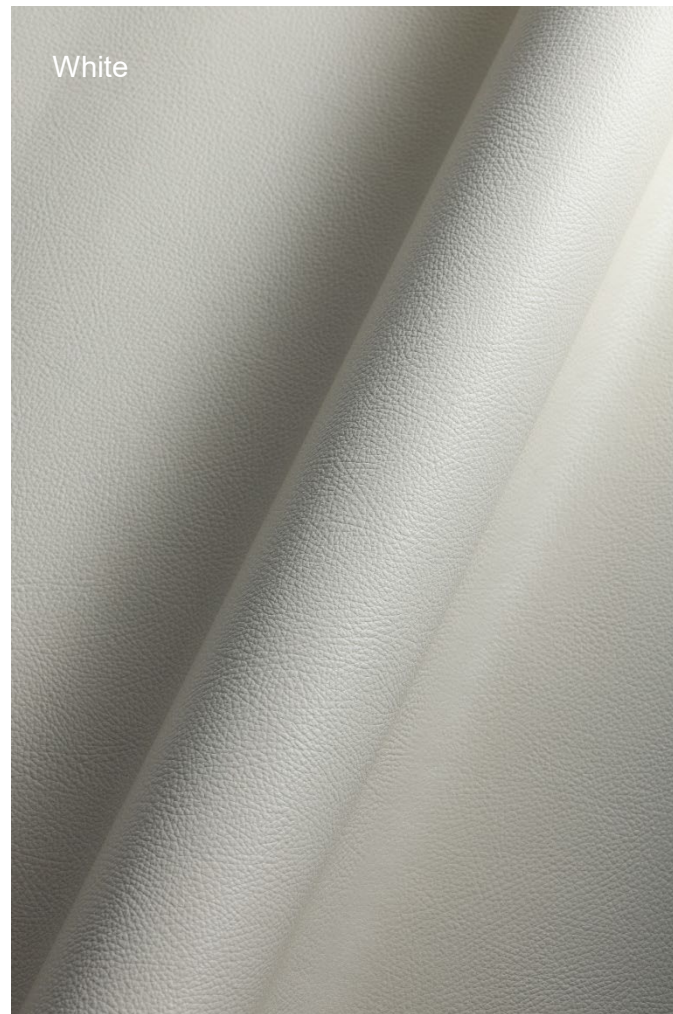
Powered by INNOVERA™



Black

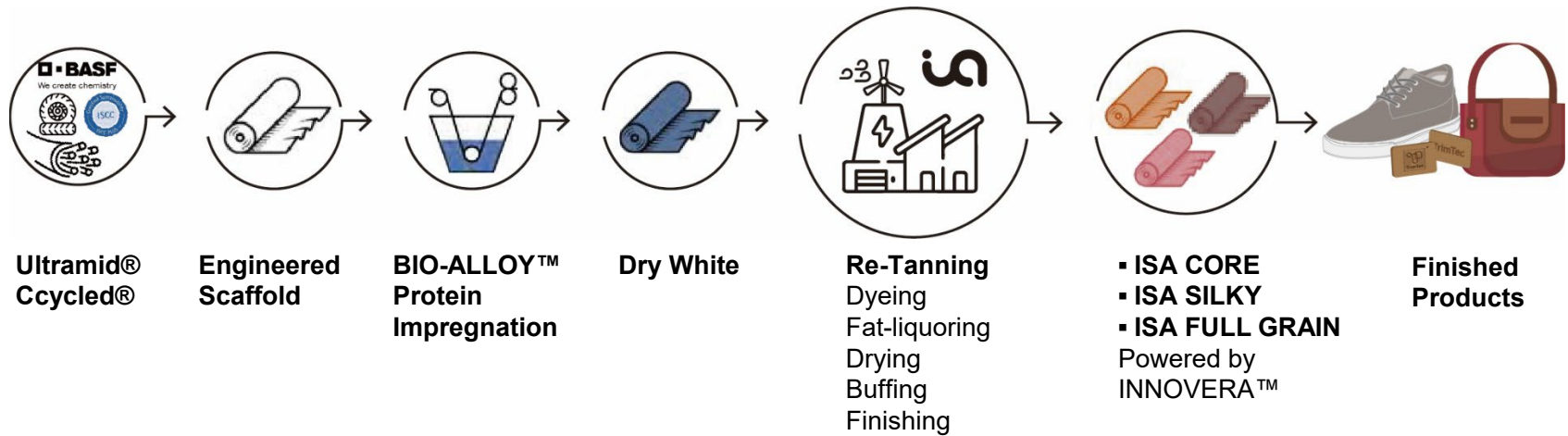


Shoes: Black



White

HOW IT'S MADE



HOW IT'S MADE

INNOVERA™ FINISHED PRODUCTS VS TRADITIONAL LEATHER

INNOVERA™ is engineered to mirror Leather's structure and functionality

INNOVERA™ Dry White



INNOVERA™ Finished Products



RETAN &
FINISH

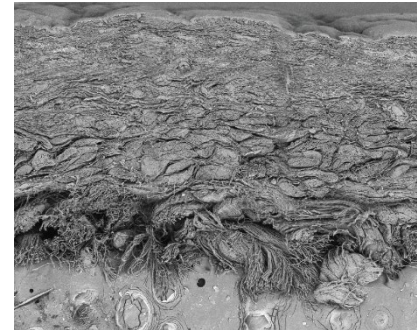
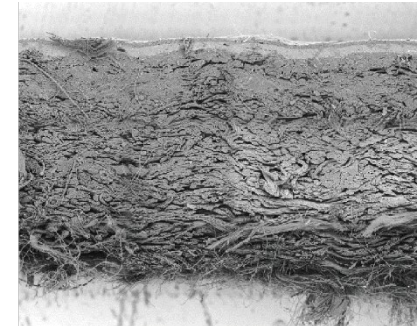


Traditional Wet Blue



Traditional Leather & Suede

CROSS-
SECTION



FEATURES



Created with Recycled Rubber
Uses post consumer waste, which never makes it to landfill. BASF Nylon recycling process of tires



Functionality Comes from Infused Plant Proteins
Traceable Non GMO soy protein isolate



Has >80% Renewable Content
Bio content of plant-based chemicals and proteins & recycled post-consumer tires



High Performance
Tensile, tear, elongation, abrasion stronger than regular suede



Finished to Look and Feel Like Leather
Genuine tanning craftsmanship



Lightweight
Lighter overall weight than suede, creates a lighter & faster product



Plant Proteins Give A Warm Touch
Improved feel over synthetic materials



Animal Free
Crafted with no animal derived products



93% Cuttable Area
No scars, brands or irregular shapes allows maximum yield



Scalability
Bio-engineered as a drop-in replacement for existing leather post-tanning

ORDERING INFO

THICKNESS:

- **CORE & SILKY** : 1.0 - 1.2mm
- **FULL GRAIN**: 0.8 - 1.0mm

COMPOSITION: 60% Post Consumer Nylon

23-28% Bio-Alloy™

12-17% Dye and Finishes

DUTY OR HTS CODE: 5603.94

PANEL SIZE: 1.25 m x 1.4 m

LEAD TIME: Production 30 days,
Samples 14 days for existing colors

CAPACITY: 150,000 sf per month

PRODUCTION LOCATION: China



ISA CORE TEST SPECIFICATION

	CORE Powered by INNOVERA™	NATURAL GRAIN LEATHER
Tensile	Specified Minimum: 18 N/mm2 Actual: around 25 N/mm2	Around 15 N/mm2
Elongation at break	Specified Minimum: 40% Actual: around 50% (roll direction) / 85% (transversal direction)	35%-65%
Baumann - slit tear strength	Specified Minimum: 80 N Actual: around 130 N (roll direction) / 100 N (transversal direction)	Around 50 N

Test Code	017 A2	Date	7/1/25	EndUser	ALL
Product Name	Core Innovera			Color	ALL
Id	Property / Description		Test Method	Units	Requirement
12	THICKNESS OF LEATHER AND INSOLE MATERIALS		SATRA TM1	mm	1.0 - 1.2
75	SOFTNESS		ISO 17235 / IUP36	mm	4.5 (+/- 0.5) @ 25 mm aperture
550	TENSILE STRENGTH		SATRA TM43	N/mm2	min. 18
2	EXTENSION AT BREAK		SATRA TM43	%	min. 40
24	TEAR STRENGTH - BAUMANN METHOD		SATRA TM162	N	min. 80
494	MULLEN BURST		ASTM D3786	kgf/cm2	min. 20
22	FLEXING RESISTANCE OF UPPER MATERIALS - BALLY FLEXOMETER - DRY		SATRA TM55	Pass / Failed	125,000 cycles No damage
485	CROCKMETER TEST - DRY - GRAIN		SATRA TM167	GSS RATING	Light colors: min. 3.5 Dark colors: min. 1.5
487	CROCKMETER TEST - WET - GRAIN		SATRA TM167	GSS RATING	Light colors: min. 3.5 Dark colors: min. 1.5
706	COLOUR FASTNESS TO MIGRATION INTO POLYMERIC MATERIAL (PVC)		ISO 15701	GSS Rating	min. 3.5
595	COLOUR FASTNESS TO WATER		SATRA TM335	GSS RATING	Light colors: min. 4 Dark colors: min. 2
104	LIGHT FASTNESS		ASTM D1148-95	GSC RATING	300 W / 50 C / 24 hours min. 3

ISA SILKY TEST SPECIFICATION

Test Code	033 A0	Date	3/11/26	EndUser	ALL
Product Name	Silky Innovera			Color	ALL
Id	Property / Description	Test Method	Units	Requirement	
12	THICKNESS OF LEATHER AND INSOLE MATERIALS	SATRA TM1	mm	1.0 - 1.2	
75	SOFTNESS	ISO 17235 / IUP36	mm	min. 5 @ 25 mm aperture	
550	TENSILE STRENGTH	SATRA TM43	N/mm2	min. 18	
2	EXTENSION AT BREAK	SATRA TM43	%	min. 60	
24	TEAR STRENGTH - BAUMANN METHOD	SATRA TM162	N	min. 80	
494	MULLEN BURST	ASTM D3786	kgf/cm2	min. 20	
22	FLEXING RESISTANCE OF UPPER MATERIALS - BALLY FLEXOMETER - DRY	SATRA TM55	Pass / Fail	125,000 cycles No damage	
485	CROCKMETER TEST - DRY - GRAIN	SATRA TM167	GSS RATING	Light colors: min. 3.5 Dark colors: min. 1.5	
487	CROCKMETER TEST - WET - GRAIN	SATRA TM167	GSS RATING	Light colors: min. 3.5 Dark colors: min. 1.5	
706	COLOUR FASTNESS TO MIGRATION INTO POLYMERIC MATERIAL (PVC)	ISO 15701	GSS Rating	min. 3.5	
595	COLOUR FASTNESS TO WATER	SATRA TM335	GSS RATING	Light colors: min. 4 Dark colors: min. 2	
104	LIGHT FASTNESS	ASTM D1148-95	GSC RATING	300 W / 50 C / 24 hours min. 3	

ISA FULL GRAIN TEST SPECIFICATION

Test Code	035 A0	Date	7/14/26	EndUser	ALL
Product Name	Full Grain Innovera			Color	ALL
Id	Property / Description	Test Method	Units	Requirement	
12	THICKNESS OF LEATHER AND INSOLE MATERIALS	SATRA TM1	mm	0.8 - 1.0	
75	SOFTNESS	ISO 17235 / IUP36	mm	2.5 (+/- 0.5) @ 25 mm aperture	
550	TENSILE STRENGTH	SATRA TM43	N/mm2	min. 18	
2	EXTENSION AT BREAK	SATRA TM43	%	min. 40	
24	TEAR STRENGTH - BAUMANN METHOD	SATRA TM162	N	min. 80	
494	MULLEN BURST	ASTM D3786	kgf/cm2	min. 20	
485	CROCKMETER TEST - DRY - GRAIN	SATRA TM167	GSS RATING	Light colors: min. 4 Dark colors: min. 2.5	
487	CROCKMETER TEST - WET - GRAIN	SATRA TM167	GSS RATING	Light colors: min. 3.5 Dark colors: min. 2	
706	COLOUR FASTNESS TO MIGRATION INTO POLYMERIC MATERIAL (PVC)	ISO 15701	GSS Rating	min. 3.5	
595	COLOUR FASTNESS TO WATER	SATRA TM335	GSS RATING	Light colors: min. 4 Dark colors: min. 2	
104	LIGHT FASTNESS	ASTM D1148-95	GSC RATING	300 W / 50 C / 24 hours min. 3	
22	FLEXING RESISTANCE OF UPPER MATERIALS - BALLY FLEXOMETER - DRY	SATRA TM55	Pass / Fail	20,000 cycles No cracking	
967	ABRASION RESISTANCE - MARTINDALE METHOD - DRY	SATRA TM31	CYCLES	Method A - 12,800 cycles Not worse than slight wear	

CERTIFICATIONS

CURRENT CERTIFICATIONS

- C2C Circularity Certifications for INNOVERA™ Dry White (*Raw Material*)
- ASTM Bio-Content Analysis for CORE I Powered by INNOVERA™ (*Finished Product*)
- ISCC PLUS-certified mass-balance recycled PA6 input derived from post-consumer tire feedstock for INNOVERA™ Dry White (*Raw Material*)
- Third-party cradle-to-tannery-gate LCA — INNOVERA™ Dry White (*Climate-change impact: 5.79 kgCO₂eq/m²*)
- AFIRM RSL compliance testing by Intertek for both INNOVERA™ Dry White and ISA CORE



PLANNED & EXPLORATORY CERTIFICATIONS

- ISCC PLUS chain-of-custody certification for ISA CORE | Powered by INNOVERA™ (*Finished Product*) — planned for YE2026
 - RCI Total Renewable Content = Recycled & Biobased - Exploratory
 - Materials Matter Standard - New Harmonized Standard Replacing GRS & RSC - Exploratory
 - Full LCA for ISA Core | Powered by INNOVERA™ estimated completion Q4 2026
- * Preliminary results 8.27 kgCO₂eq/m²

CERTIFICATIONS

SGS

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COMPONENT LIST / List of Materials

Sample Component	Description	Material	Color	Remark
No. 1	Isotonic	Other materials	tan	

Test Sample Identification

Component	Remarks
	Material label provided for testing

Test Method:

SGS Vegan Screening (SGS VP100-2021) Program – Materials analyses based on the following test techniques:

- Identification via Microscopic Analysis
- IR (IR) screening against standard library
- Collagen Screening based on specific target marker detection with-HPLC-AMERS. Confirmation test based on amino acid analysis will be conducted upon detection of specific target marker.

Test Result:

Components	Material No.	Results	Remarks
All tested Components	–	Animal/Nonfood Material Not Detected	–

Notes:

The result is reported according to SGS Vegan Screening (SGS VP100-2021) Program which is based on SGS know-how and publicly available sources at the time the program is developed. No representation or warranty is made with regards to its completeness and no liability will be accepted for damages or consequential loss whatsoever resulting from the use of this product directly or indirectly, or reliance on the information provided. The table above only shows components with detected animal-derived materials, and components without animal derived material are not reported.

If some plant materials may also give positive results in the Screening test, Confirmation test based on amino acid analysis is required to verify the source of detected target marker.

The method reporting limit is 100 mg/kg.

**** End of Report ****

This program is subject to change without notice. The results of this program are based on the current version of the program. The results of this program are not intended to be used for any other purpose. The results of this program are not intended to be used for any other purpose. The results of this program are not intended to be used for any other purpose.

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SGS

Test Report SL1250031879401TX Date: July 07, 2025 Page 2 of 3

Summary or Test Result: (Detail test results on next page)

Test Parameter	Conclusion
SGS Vegan Screening (SGS VP100-2021) Program	(Pass / Fail) PASS

Notes:

- PASS – No animal-derived material was detected on all tested components.
- FAIL – Animal-derived material was detected on tested component.
- NT/INM/AAX – Specific target marker detected from the screening test. There is a possibility of animal-derived material presence on the product. Please send analysis is recommended to confirm the presence of animal-derived substances.

Disclaimer:

The conclusion is drawn according to the SGS Vegan Screening (SGS VP100-2021) Program which is based on SGS know-how and publicly available sources at the time the program is developed. No representation or warranty is made with regards to its completeness and no liability will be accepted for damages or consequential loss whatsoever resulting from the use of this product directly or indirectly, or reliance on the information provided.

Sample Photo



Signed for and on behalf of
SGS (Hong Kong) Limited

Chen Kai Kong
Chen Kai Kong, Jaffed, Technical Manager

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Test Report SL1250031879401TX Date: July 07, 2025 Page 1 of 3

ISA INDUSTRIAL LIMITED
Zhenfeng (in Yau) Building, 151 Johnston Road, Wanchai, Hong Kong

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description: (A) ISOTONICS

Our Reference Report

Buyer	Color	Order No.	Article No.
		C002517	Isotonic

Sample Received Date: Jun 18, 2025
Sample Testing Date: Jun 18, 2025 – Jul 07, 2025

Test Method: According to SGS Vegan Screening (SGS VP100-2021) Program

Test Results: Please refer to the next page(s).

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SGS Vegan Certification

Act Now!

Join us in shaping a material-future that is aligned with science, sustainability, and scale!

For more information about ISA INNOVERA™ finished products, please feel free to contact your account manager.