

STYRENICS

Edistir[®] ICE

TECHNICAL SHEETS

R 930 XP



versalis

Edistir® ICE R 930 XP

Versalis produce **Edistir®** HIPS utilizzando l'innovativa tecnologia di polimerizzazione in massa continua sviluppata dal suo R&D sfruttando le conoscenze acquisite nella sintesi dei materiali plastici stirenici (ABS, SAN e GPPS).

Versalis produces **Edistir®** HIPS using the innovative continuous mass polymerization technology developed by its R&D, exploiting the knowledge acquired in the synthesis of styrene plastic materials (ABS, SAN and GPPS).

Edistir® ICE R
930 XP
TECHNICAL SHEET

Edistir® ICE R 930 XP

Edistir® ICE R 930 XP

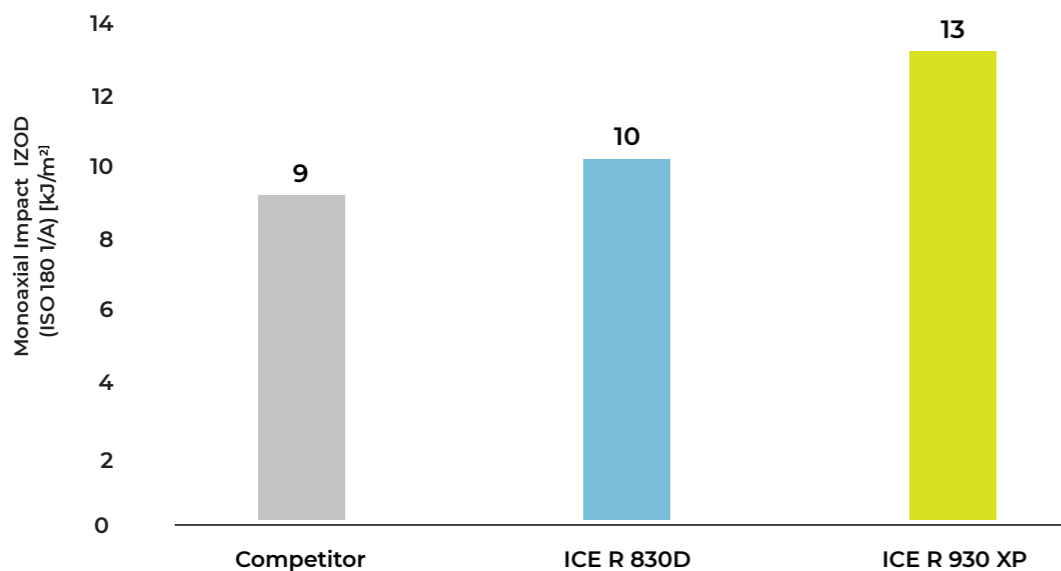
Sfruttando il proprio know-how, Versalis ha messo a punto un nuovo prodotto dalle elevate proprietà ESCR Environmental Stress Cracking Resistance, con una **resistenza a impatto migliorata** senza penalizzazione del modulo elastico: **Edistir® ICE R 930 XP**.

Taking advantage of its know-how, Versalis has developed a new product with high Environmental Stress Cracking Resistance ESCR properties, **with enhanced Impact Resistance** without penalizing the elastic modulus: **Edistir® ICE R 930 XP**.



Fig. 1

Resilienza Izod a confronto
Izod Impact Resistance in comparison

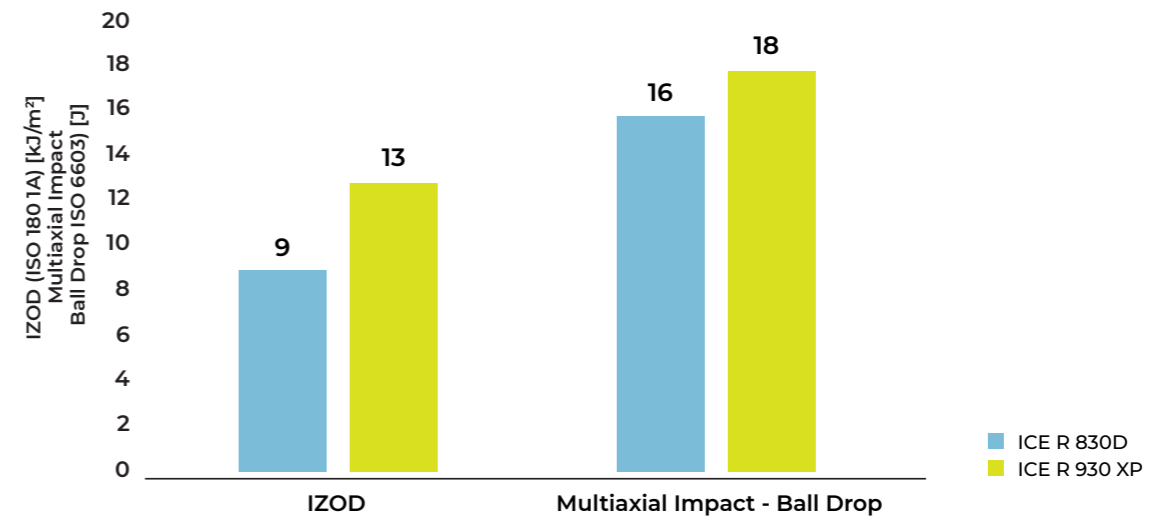


Mantenendo quindi le proprietà intrinseche derivanti dalla tecnologia Versalis quali l'ampia finestra di lavorabilità e il basso contenuto di chemicals e composti organici volatili TVOC, **Edistir® ICE R 930 XP** è caratterizzato da significativi miglioramenti della resistenza a impatto associati all'ottimizzazione delle proprietà reologiche e termiche del materiale.

Therefore maintaining the intrinsic properties resulting from Versalis technology, such as a wide window of workability, low content of chemicals and TVOC, **Edistir® ICE R 930 XP** together with excellent rheological and thermal properties shows significant improvements in terms of impact resistance.

Fig. 2

Izod e Falling Dart a confronto tra gradi Edistir® Ice
Izod and Falling Dart in comparison between Edistir® Ice grades

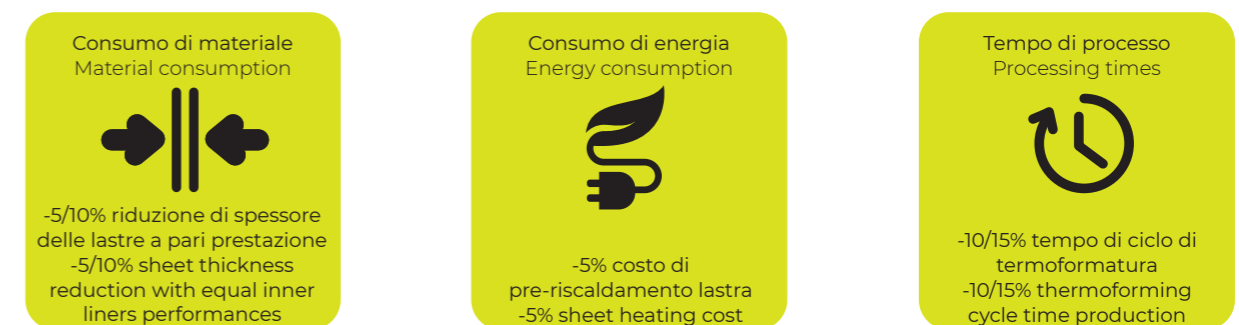


A fronte del rafforzamento della resistenza all'urto e del miglioramento della processabilità sia in fase di estrusione che di termoformatura, **Edistir® ICE R 930 XP** permette all'utilizzatore finale di ottenere celle frigo con ottime prestazioni anche partendo da lastre con **spessore ridotto**.

Strengthening the impact resistance and improving the processability both in the extrusion and in the thermoforming phase, **Edistir® ICE R 930 XP** allows the end user to obtain inner liners with excellent performance even starting from sheets with **reduced thickness**.

Fig. 3

Perfezionamento delle prestazioni
Performance Improvement

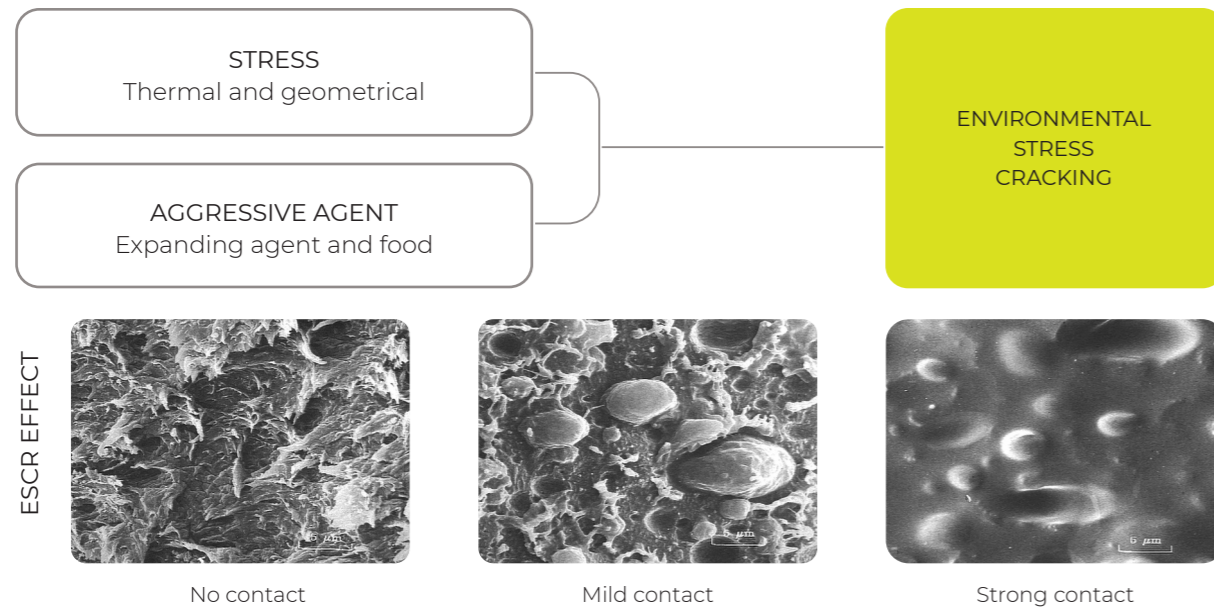


Le sue peculiari caratteristiche, come il **contenuto trascurabile di residui TVOC** e di chemicals, e la **resistenza alle sostanze oleose e grasse**, fanno di Edistir® ICE R 930 XP un materiale d'eccellenza anche nel packaging alimentare avanzato.

Due to its peculiar set of properties, such as the **minimum amount of residual monomers and chemicals (TVOC)** and **excellent resistance to oils and fats**, Edistir® ICE R 930 XP successfully meets advanced food packaging needs too.

Fig. 4

Descrizione del fenomeno di Environmental Stress Cracking
Environmental Stress Cracking phenomenon description



Di seguito si riportano i valori tipici del materiale.
In the table below are reported typical material main properties.

Caratteristiche principali
Main characteristics

	STANDARD	TEST CONDITION	UNIT	ICE R 930 XP
MFI	ISO 1133	200°C/5 Kg	g/10min	2,5
IZOD	ISO 180 (C.i. 80x10x4mm)	23°C	kJ/m ²	13
VICAT	ISO 306	5 Kg- 50°C/h	°C	89
Tensile Modulus	ISO 527-1	1mm/min	MPa	1450

Versalis è disponibile ad approfondire ogni aspetto specifico su queste tematiche.
Versalis is available to provide details on the information above.



Versalis in the world



Versalis is focused on establishing itself as a solution provider, offering a range of increasingly market-oriented products at an international level. The company is present in the APAC region through its Shanghai-based subsidiary, Versalis Pacific Trading; in Mumbai, India; in Singapore; and in South Korea through LVE, a joint venture with Lotte Chemical.

Versalis can also count on subsidiaries Versalis Americas – with offices in Houston, Texas – and Versalis Mexico. Furthermore, Versalis serves the oil and gas industry with offices in Ghana and in Congo, with its portfolio of oilfield chemicals. Thanks to a widespread sales network, distributors and sales agents, Versalis can serve all markets worldwide.

HEADQUARTERS

San Donato Milanese, Milan (Italy)

LICENSING

Algeria
Brazil
China
Egypt
India
Iran
Japan
Malaysia
Portugal
Qatar
Romania
Russian Federation
Slovak Republic
South Korea
Spain
Taiwan
USA
Venezuela

R&D

ITALY
Ferrara
Mantua
Novara
Porto Torres
Ravenna
Rivalta Scrivia

SALES NETWORK

Austria
Belgium
China
Congo
Czech Republic
Denmark
France
Germany
Ghana
Greece
Hungary
India
Italy
Mexico
Poland
Portugal
Romania
Russian Federation
Singapore
Slovak Republic
South Korea
Spain
Switzerland
Sweden
Turkey
United Arab Emirates (VPM, a joint venture with Petrochem/Mazrui Energy Services)
UK
USA

PLANTS

ITALY

Brindisi:
- Steam cracking
- Aromatics
- Polyethylene

Crescentino:
- Bio-ethanol

Ferrara:
- Elastomers
- Polyethylene

Mantua:
- Intermediates
- Styrene
- Styrenics

Porto Marghera:
- Recycled polymers

Porto Torres:
- Elastomers
- Renewable chemistry

Priolo:
- Steam cracking
- Aromatics

Ragusa:
- Polyethylene EVA
- Butadiene

Ravenna:
- Elastomers

UK

Grangemouth:
- Elastomers

FRANCE

Dunkerque:
- Steam cracking
- Polyethylene EVA

GERMANY

Oberhausen:
- Polyethylene EVA

HUNGARY

Százhalombatta:
- Styrenics

SOUTH KOREA

Yeosu (LVE, a joint venture with Lotte Chemical):
- Elastomers



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Versalis spa

Piazza Boldrini, 1
20097 San Donato Milanese (MI) - Italy
Ph. 0039 02 520.1

info.styrenics@versalis.eni.com
versalis.eni.com

Technical service

Ph. +39 0376 30 5537
Ph. +39 0376 30 5596

Sales and marketing

Ph. +39 520 42022
Ph. +39 520 32214

Customer service

Ph. +39 520 32040

