



Introducing Makroblend[®] M5005 FR Makrolon[®] M6011 FR

superior chemical resistance

Makroblend[®] M5005 FR and **Makrolon[®] M6011 FR** offer superior chemical resistance against aggressive disinfectants, next generation flame retardancy, skin contact biocompatibility and global availability.

Market challenges for electromedical devices



On any given day, about **1 in 31** hospital patients has at least one healthcare-associated infection (HAI)*. Aggressive disinfectants are used to prevent HAIs.



The Centers for Medicare & Medicaid Services (CMS) began the Hospital-Acquired Condition (HAC) Reduction Program** where poorly performing hospitals receive reduced funding.



The Restriction of Hazardous Substances (RoHS 3) restricts the use of 10 substances in the production of electromedical devices, including certain brominated flame retardants***.

*Centers for Disease Control and Prevention. <https://www.cdc.gov/hai/data/index.html>

**The Centers for Medicare & Medicaid Services. <https://data.cms.gov/provider-data/dataset/yq43-i98g>

***<https://www.rohsguide.com/>

Count on Makroblend® M5005 FR & Makrolon® M6011 FR



Monitoring equipment



Infusion pumps



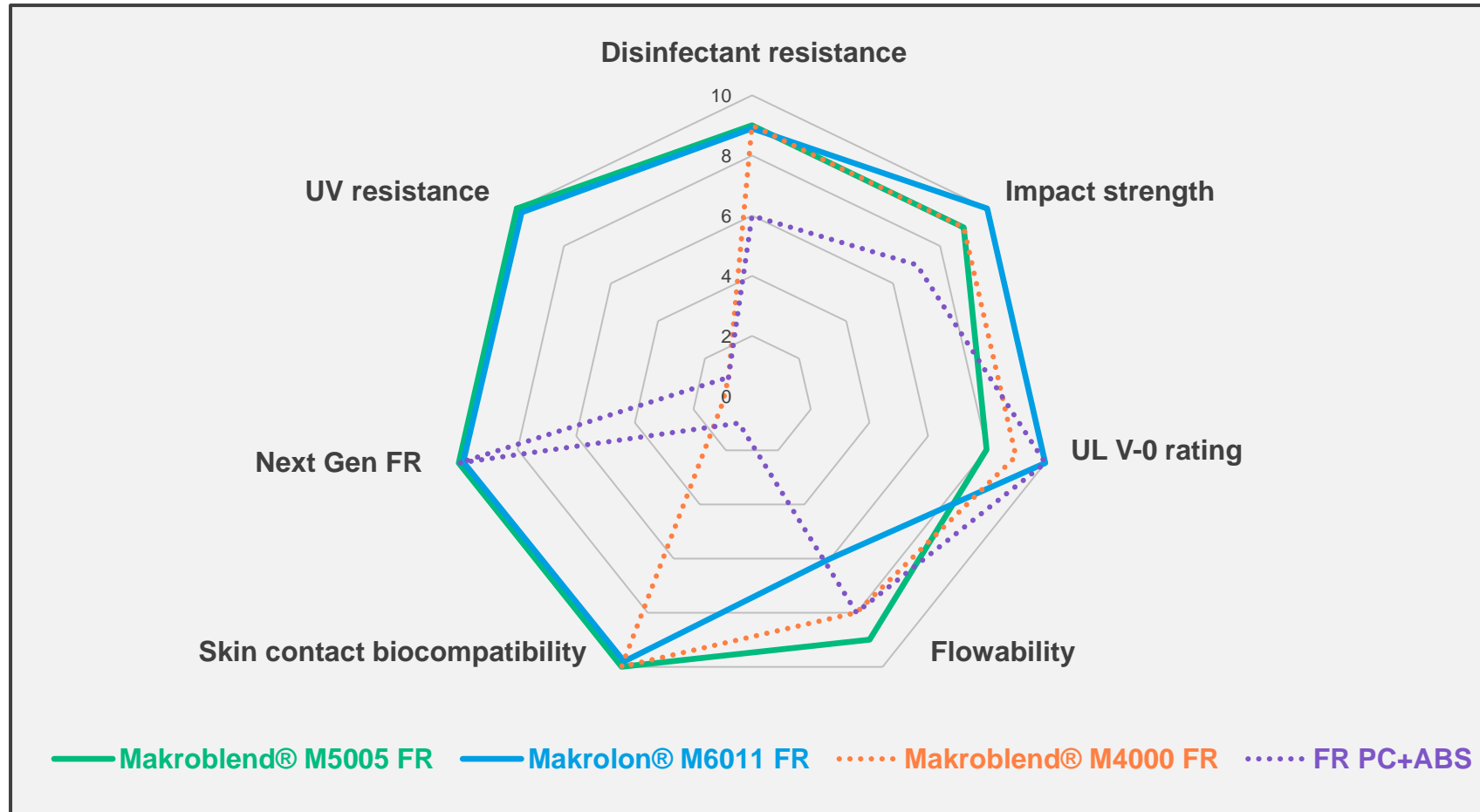
Diagnostic equipment



Automated external defibrillators

For electromedical device housings that require improved resistance to harsh disinfectants, UV light and environmental stress cracking

Makroblend® M5005 FR & Makrolon® M6011 FR enhance our portfolio by providing the **best overall balance** of properties



Makroblend[®] M5005 FR & Makrolon[®] M6011 FR provide **chemical resistance** to aggressive disinfectants

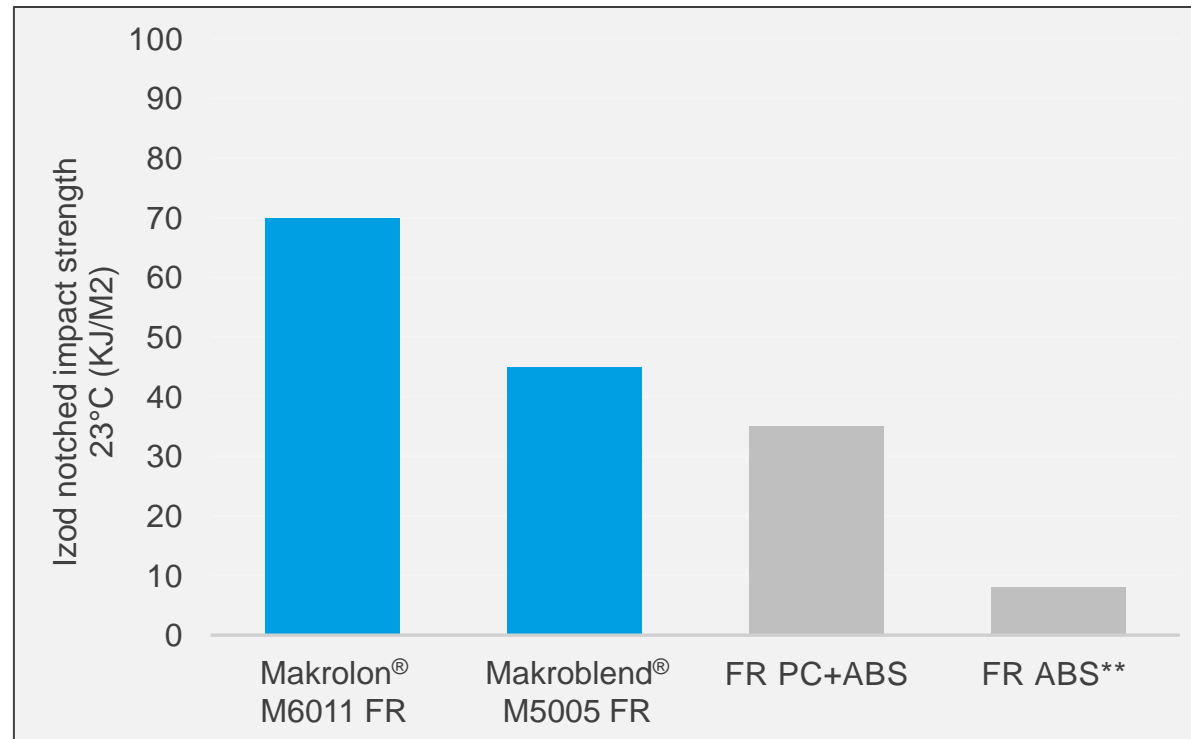


	Makroblend [®] M5005 FR	Makrolon [®] M6011 FR	Makroblend [®] M4000 FR	FR PC+ABS
CaviCide™	R	R	R	R
Clorox Healthcare® Bleach Germicidal Wipes	R	R	R	R
Lysol® Disinfecting Wipes (Lemon & Lime)	R	R	R	R
Opti-Cide3® Surface Wipes	R	R	R	R
Oxivir® Tb	R	R	R	N
Sporicidin®	R	R	R	R
Super Sani-Cloth® Germicidal Wipes	R	R	R	R
Sani-Cloth® HB	L	L	L	N
Virex® II 256	R	R	R	R

R = Resistant, L = Limited resistance, N = Not resistant

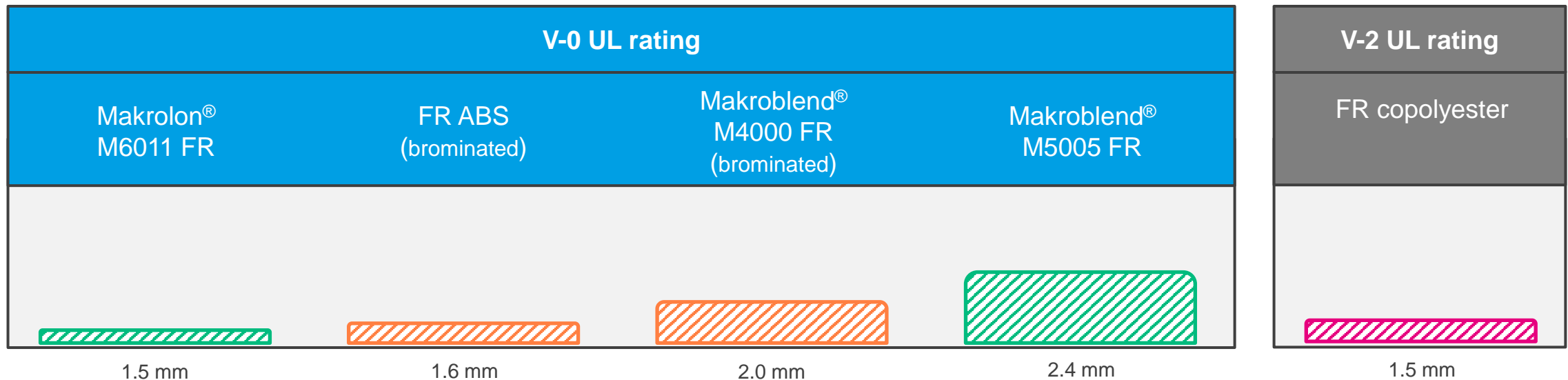
Covestro Internal Data. ASTM D638 Type I tensile samples were continuously subjected to wet cleaners for 24 hours at room temperature at flexural strains ranging from 0.6% to 1.0%. Pass criteria were absence of visual cracking, >98% retention of tensile strength and yield in a ductile way, with full neck formation and >9% nominal elongation-at-break, referenced to control samples held at the same strain but not subjected to cleaners.

Makroblend® M5005 FR & Makrolon® M6011 FR for **durable** electromedical devices



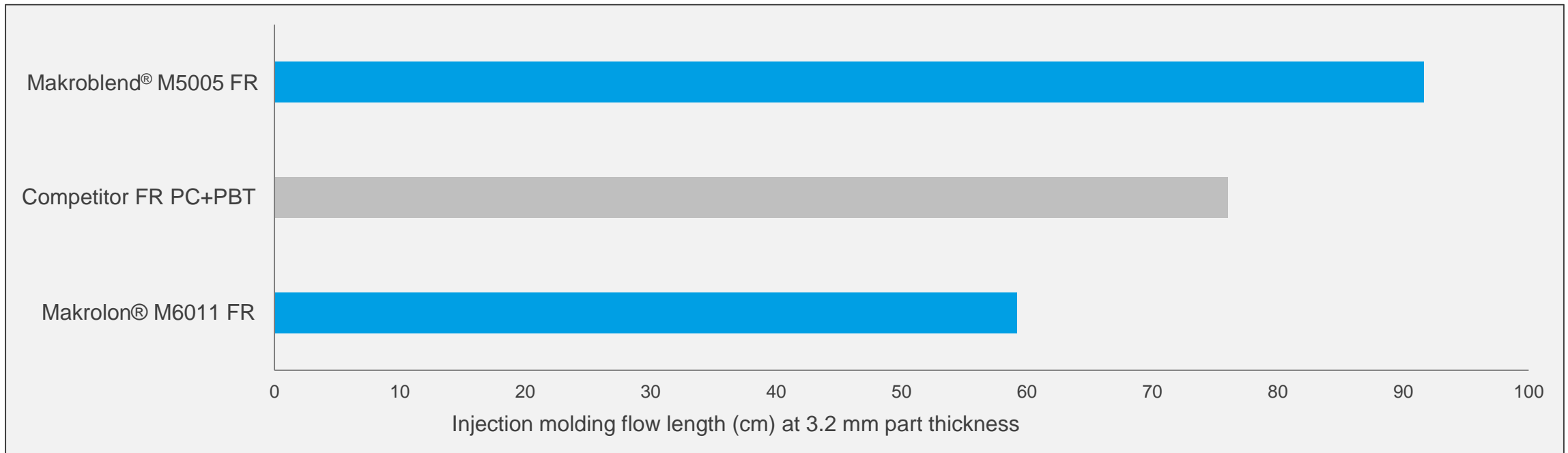
Makroblend® M5005 FR & Makrolon® M6011 FR provide **higher impact strength** than FR ABS

Makroblend® M5005 FR & Makrolon® M6011 FR are based on **next generation** flame retardants with **UL V-0** rating



 Wall thickness representation

Relative flowability of our new materials



Makroblend® M5005 FR has enhanced melt flow
Makrolon® M6011 FR processes like standard polycarbonate

Makroblend® M5005 FR & Makrolon® M6011 FR are **skin contact biocompatible** per ISO 10993



Skin contact biocompatibility per ISO 10993 for contact of 30 days or less

Product stewardship

Notification of change

FDA Device (MAF) and Drug Master File (DMF) available upon request

Manufactured at ISO 9001 certified sites that follow GMP standards



You'll find us around the world ... and just around the corner



3
innovation hubs

9
production sites

We take pride in the **global consistency, quality and reliable supply** of our Healthcare polycarbonate materials



Customization available for a variety of opaque colors

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Thank you!

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