Resilience™ HC Healthcare Formulations

For Medical Device Housings

Resilience™ HC is a line of rigid vinyl materials created for medical device housing applications. It's formulated with increased chemical resistance, easy processing, high quality aesthetics and excellent durability.

Resilience HC has proven field performance for point-of-care durability in both stationary and handheld medical devices. Its USP Class VI approval and high process versatility make it an excellent material choice for healthcare device applications.

KEY CHARACTERISTICS

- Resists cracking, crazing, and discoloration from exposure to most disinfectants
- Provides excellent aesthetics and high durability
- USP class VI approval
- UL flame rating up to UL94 5VA
- UV resistance provides long-term color stability

MARKETS AND APPLICATIONS

Resilience HC is suitable for medical device housing applications requiring resistance to the wide range of disinfectants used in hospitals.

- Resists chemical stress failure in housings due to disinfectants exposure
- Resists impact and protects internal components in handheld devices
- Provides lasting color performance for devices exposed to UV light

PolyOne™

PROPERTY RETENTION OF POLYMERS AFTER EXPOSURE TO HOSPITAL DISINFECTANTS

Tensile Stress at Break Charts*

	T-Spray™ (Quaternary ammonium)	CaviCide™ (Isopropanol)	Cidex Plus® (Glutaraldehyde)
Acceptable 90–100%	Resilience HC	Resilience HC	Resilience HC
Marginal 50–90%	PC+PBT	PC+PBT PC+ABS PC+PET	PC+PBT
Poor <50%		ABS	ABS
Cracked	ABS PC+ABS PC+PET		PC+ABS PC+PET

* Property retention after 3 days of intermittent exposure to disinfectant.

Product choices often vary by region due to differences in regulatory and agency requirements, availability and other key factors. Please contact your nearest sales office for assistance in choosing the right solution for your locale.

RESILIENCE HC SOLUTIONS

PRODUCT	FEATURE	FLAME RATING	IMPACT (ft · lb/in)	USP CLASS VI	HDT[1]	SPECIFIC GRAVITY	TENSILE STRENGTH (psi)	FLEXUAL MODULUS (psi)
HC 8210	Medium Flow, Medium Impact	5VA @ 1.5mm V0 @ 0.75mm	12.0	✔	162°F 72.2°C[2]	1.33	6000	340,000
HC 8220	High Flow, High Impact	N/A	21.0	✔	156°F 68.9°C	1.33	7000	400,000
HC 8230	Medium Flow, High Impact	5VA @ 2.0mm V0 @ 1.5mm	24.0	✔	157°F 69.4°C	1.33	6600	393,000
HC 4895	High Impact, Transparent	V0 @ 1.5mm	17.0	✔	160°F 71.1°C	1.30	6200	340,000
HC 8250H	High Heat Distortion Temp	5VA @ 1.6mm V0 @ 1.6mm	5.0	✔	172°F 77.8°C	1.26	6400	347,000

[1] Unannealed at 66 psi

[2] Annealed at 264 psi

1.866.POLYONE
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