



Science.
Applied to Life.™

Designed to maximize range and minimize cost.

3M™ Matrix Resin

When balancing range, cost and weight become critical design challenges, 3M delivers a unique epoxy resin for ultimate FCEV design flexibility. No process modification. Thinner walls. Lighter weight.



Longer Range



Lighter Weight

Matrix Resins designed for hydrogen fuel storage applications

Type IV Pressure Vessel Performance

- 28% increase in fiber delivered strength from hydroburst
- 12% increased volume – resulting in further range
- 12% decreased weight

3M Matrix Resin results in a 5-21% weight reduction as compared to standard H2 Tank designs and up to 20% cost savings.

Look to 3M for new solutions in range, cost savings, weight reduction and more for the unique and evolving challenges in fuel cell electric vehicles (FCEV)

As one of the worlds largest epoxy formulators, 3M is uniquely positioned to supply resins for advanced composites.

- Differentiated capabilities to disperse nanoscale additives in higher viscosity liquid resins at large volume
- Vertically integrated in key chemical production
- Global manufacturing capacity to supply resins

We'll help you optimize your design and collaborate to enhance your specific FCEV application.

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Pressure vessel cross section



Lighter Weight, Lower Cost

Lighter Weight, Lower Cost
Longer Range

-21%	Weight	-12%
+0%	Volume	+12%
-16%	Cost	-5%



Pressure vessel with 3M[®] Matrix Resins