

MARS 6[™] Synthesis Vessels

Safe Microwave Chemistry

Why are CEM's microwave vessels the safest on the market?

Each individual vessel is surrounded by our patented, advanced composite sleeve for maximum protection. Over 15 years ago, we used a rigid, plastic material to surround our microwave vessels, just like other microwave laboratory system manufacturers. We quickly came to realize that the plastic material would not hold up if the vessel failed, so we began the search for a better material from which to make the vessel sleeve. We soon developed a stronger, more flexible composite material that would expand in the event of a vessel failure, greatly reducing damage to the microwave and neighboring vessels if an unfortunate event occurred. Other companies have tried to imitate CEM's design, but none offer an alternative that is as durable and safe as our proprietary, advanced-composite vessel sleeve material.



EasyPrep™ & EasyPrep™ Plus

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Maximum	Vessel	Vessel	Maximum	Maximum Control Pressure
Capacity	Material	Volume	Temperature	
Up to 12 vials	Teflon	100 mL	300 °C	800 psi



Open Vessel

The open vessel option for MARS 6 allows researchers to use existing, conventional glassware in a scientific microwave. As the most cost-effective way to start performing microwave chemistry, the open vessel option permits easy access to the reaction solution for addition or removal of reaction solution, removal of gaseous by-products, application of non-ambient atmospheres, and mechanical stirring for viscous reactions. In addition, this option accommodates the largest reaction scale, fitting up to a 5-L round-bottom flask in the MARS 6 cavity. This means chemists can enjoy the flexibility of conventional glassware while benefiting from the heating advantages of microwave technology.

Maximum Capacity	Vessel Material Standard	Vessel Volume	Maximum Temperature	Maximum Control Pressure
1 Round Bottom flask	Glass	250 mL - 5 L	300 °C	N/A

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