



Discover 2.0

MARS 6 Synthesis

Overview

The Discover 2.0 is a single mode microwave reactor that is ideal for teaching laboratories at academic institutions or research laboratories performing initial investigative syntheses and chemistry optimization.

- Is suited for smaller class sizes of individual students or larger class sizes of student pairs
- Accommodates accessories enabling the use of gaseous reagents, sub-ambient reaction temperatures, and flow chemistry
- Can be outfitted with automation for “hands free” operation during laboratory sessions
- Features on-board videos to train students on proper vessel and instrument use

The MARS 6 Synthesis reactor is a multimode microwave system well suited for the teaching laboratory. It can also be used in research settings when large scale experiments or chemistry requiring non-glass vessels are performed.

- Performs reactions in parallel, accommodating up to 36 vessels run at one time
- Is ideal for general, organic, inorganic, or analytical chemistry (digestion/extraction)
- Can process up to 1 L of reaction volumes in parallel, sealed vessels
- Features on-board videos to train students on proper vessel and instrument use

Reaction Volume	0.2 mL – 70 mL	3 mL – 3 L
Reaction Processing	<ul style="list-style-type: none"> • Sequential: One Reaction at a time • Autosampler accessory is available for automated queue processing 	Parallel: Batch reaction processing, up to 36 at once
Temperature & Pressure	<ul style="list-style-type: none"> • Up to 300 °C • Pressurized and reflux reactions 	<ul style="list-style-type: none"> • Up to 300 °C • Pressurized and reflux reactions
Vessels	Glass, Quartz, or Teflon liners	Glass or Teflon
Recommended Class Size	Class size of less than 12 Students	Class size of more than 12 Students
Safety Features	<ul style="list-style-type: none"> • iWave® sensor controls exothermic reactions • Activent technology prevents over-pressurization • Software prevents accidental method programming/editing errors • Stirring effectively homogenizes sample 	<ul style="list-style-type: none"> • TempGuard™ safely limits temperature • Vent-and-reseal vessels prevent over-pressurization • Software prevents accidental method programming/editing errors • Stirring effectively homogenizes sample

Need help? Get expert advice at cem.com/contact