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Technical Specifications for Microwave Synthesizer
RFX NO. 6100000752 (Reference No. 1000016237)

1. Microwave hardware Microwave cavity

~18/8 stainless steel housing with multi-layer PTFE coating Large microwave cavity ~ 43x40x41(h) cm (~ 60 L or more)

2. Inlet/Outlet ports Removable large flange with ~ 36 mm ID plus additional ports on side walls

3. Chassis

Protected against acids and solvents with polymer coating

4. Door Completely made of stainless steel Self-resealing pressure responsive door Multiple independent safety interlocks to prevent microwave emission in case of improper closure or misalignment

5. Coloured backlit logo indicates the process status Exhaust system

Built-in, located at the rear of the cavity and separated from electronics to prevent

6. Microwave emission

Dual magnetron system with rotating diffuser for homogeneous microwave distribution Two ~ 950 watt rated magnetrons, for a total of 1900 watt

Continuous PID-controlled microwave emission at all power levels

7. Appropriate Emission and safety norms

Advanced features

a. Built-in software controlled digital camera Built-in turntable motor kit Built-in magnetic stirring Built-in infrared temperature sensor

b. Control terminal touch-screen, ~ 6.5" TFT display ~ 640x480 VGA resolution with ~ 64k colors

c. 5 USB ports; 1 RS-232 port; 1 LAN port; 2 video ports

8. Operating software

At least English

9. Operator manual in English language

a. Weight: ~ 80 kg

b. Power supply: 230V/50Hz 3,5 kwatt

10. Classic Glassware package should include:

Glassware kit with 500 mL flask p/n SGL0230; Glass connecting tube 450 mm p/n GLS0009/A; Stopper for glass reactor p/n 70151 (minimum of one number each)

11. HIGH-PRESSURE PACKAGE (FOR PARALLEL SYNTHESIS UNDER PRESSURE)

a. Vessels volume: ~ 100 mL; temperature ~ 300°C;

b. pressure ~ 100 bar, includes:

c. Rotor body (at least 1 no)

d. Standard segment complete (at least 15 no)

e. Workstation complete (at least 1 no)

f. Tension wrench with adapter (at least 1 no)

g. Stirring bar (at least 10 no)

h. Segments labels numbers 1-15, purple-white (at least1 no)

12. Required temperature control by fiber optic or any other equivalent technology

13. Easy TEMP direct contact-less temp control in all vessels

14. System should include following (at least one number each)

a. Solid Phase reactor complete 50, 300, 2500 mL with below items for each reactor

b. {Solid-Phase reactor complete should include Cover for glass vessel

c. Glass vessel 300 mL

d. Support for glass vessel

e. Stirrer D 30 mm x 120 mm}

f. Pre-installed Solid-Phase reactor turning motor assembly

g. Suitable module for solvent extraction

h. Multi interface box connection

15. System should be supplied with Minimum 3 years of comprehensive warranty