







**NEW**

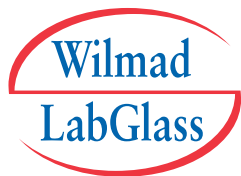
*Wilmad Sets the Standard for NMR Consumables*

## Select-A-Product Guide

*a bridge between your experiments and our products*

### Table of Contents:

	Page
 <b>General Select-A-Tube Guide</b>	<b>1</b>
 <b>Economy and Precision Tube Comparison Sheet</b>	<b>2</b>
 <b>Select-A-Product Guide for NMR Caps</b>	<b>3</b>
 <b>Select-A-Product Guide for MAS Caps</b>	<b>3</b>
 <b>Select-A-Product Guide for Small Volume NMR</b>	<b>4</b>
 <b>Select-A-Product Guide for Gas-Tight Tubes</b>	<b>5</b>



Quality Manufactured  
in the USA  
ISO 9001:2008 Certified  
An SP Industries Company

**ORDER  
TODAY**

**Call: 1-800-220-5171**

**or 856-691-3200**

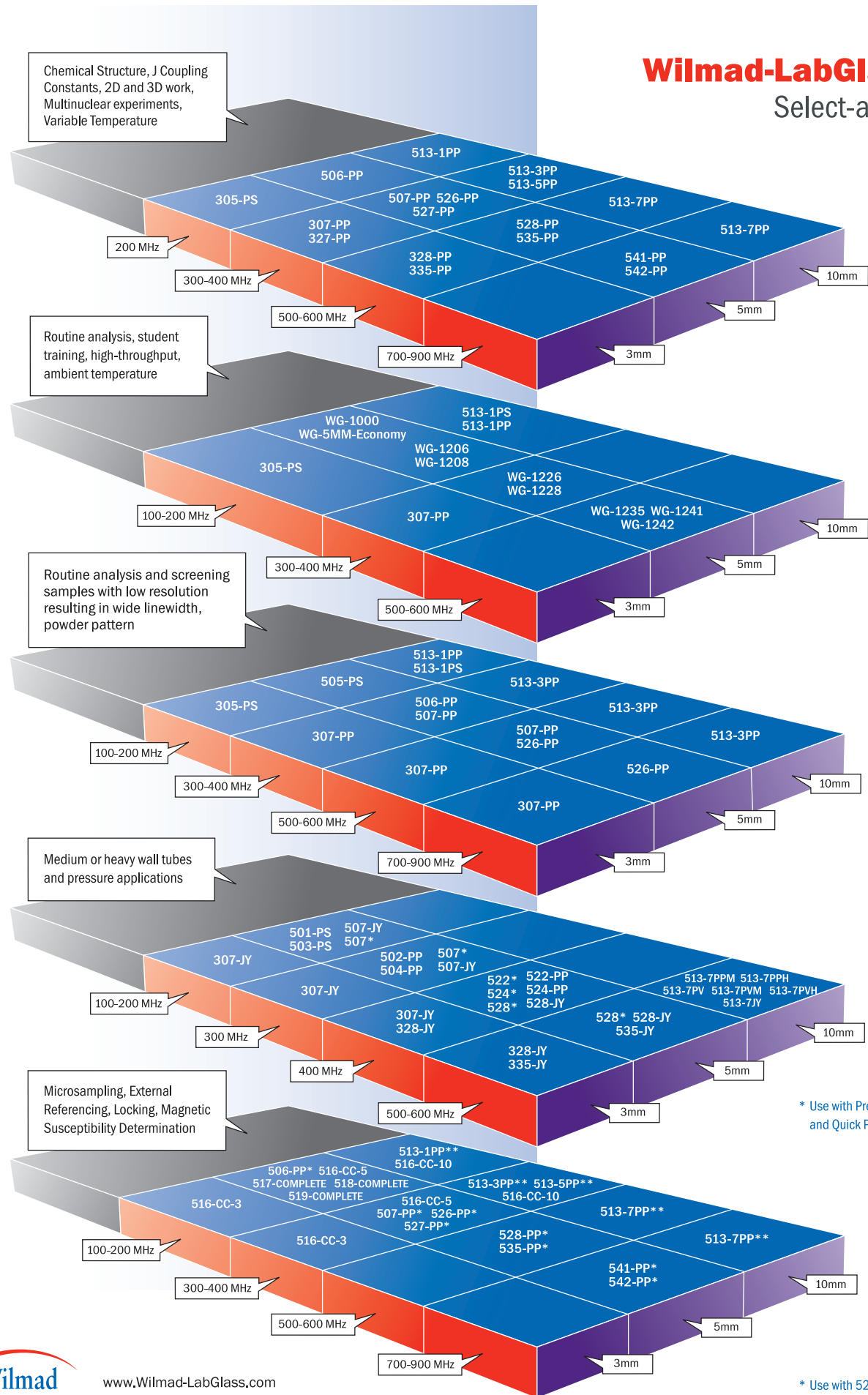
**Fax: 1-800-220-1081**

**or 856-691-6206**

**On Line:**

**[www.Wilmad-LabGlass.com](http://www.Wilmad-LabGlass.com)  
[cs@wilmad-labglass.com](mailto:cs@wilmad-labglass.com)**

# WilmaD-LabGlass NMR Select-a-Tube Guide



NMR APPLICATION
MAGNETIC FIELD STRENGTH
TUBE O.D.
PART NUMBER

\* Use with Pressure Valve (PV) and Quick Pressure Valve (QPV)

\* Use with 529, WGS-5BL, 517-INNER, 518-INNER, and 519-INNER  
 \*\* Use with WGS-10BL and 529



www.WilmaD-LabGlass.com  
 Phone: 856-691-3200  
 Toll-Free: 800-220-5171  
 Reprinted 7-09

## Wilmad-LabGlass Economy and Precision Tube Comparison Sheet

	Economy	Precision (Glass)	Precision (Quartz)	Precision (Suprasil)
<b>Material</b>	ASTM Type 1 Class B Borosilicate Glass (commercial name N51A)	ASTM Type 1 Class A Borosilicate Glass (commercial name Pyrex)	Clear Fused Quartz	Synthetic Quartz
<b>Impact on shimming quality by paramagnetic impurities<sup>1</sup></b>	Medium (>1200 ppm Fe <sub>2</sub> O <sub>3</sub> )	Small (400 ppm Fe <sub>2</sub> O <sub>3</sub> )	None (0.5 ppm Fe <sub>2</sub> O <sub>3</sub> )	None (<0.005 ppm Fe <sub>2</sub> O <sub>3</sub> )
<b>Rapid cooling/heating</b>	No	Yes, within 120 °C	Yes, within 300 °C	Yes, within 300 °C
<b>Max. working temperature</b>	Ambient	230 °C	1300 °C	1300 °C
<b>Sample volume reproducibility<sup>2</sup></b>	10%	0.5%	0.5%	0.5%
<b>Cut-off wavelength</b>	320 nm	320 nm	265 nm	190 nm
<b>Recommended Application</b>	1D NMR experiments with small organic molecule (Molecular Weight <1500) below 600 MHz	Experiments requiring critical shimming quality (high/ultra high field, non-spinning, multi-dimension, multi-nuclei, DNP experiments and studies involving with biological samples)	Photochemistry studies and experiments involving with rapid freezing procedure in liquid nitrogen	Photochemistry with UV light source and EPR studies

Note 1: Impact on shimming quality varies upon magnetic field strength. Economy tube is recommended for 1D low field experiments.

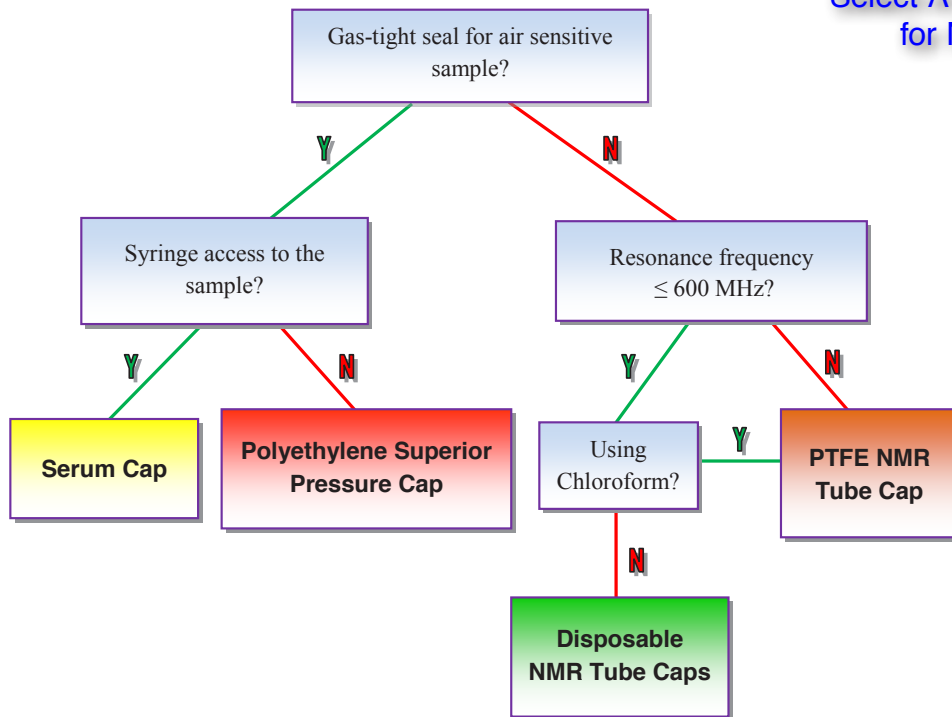
Note 2: Sample volume reproducibility refers to the maximum volume fluctuation when filling different NMR tubes to the same sample height. This number correlates to the reproducibility of time domain signal amplitude between different runs.



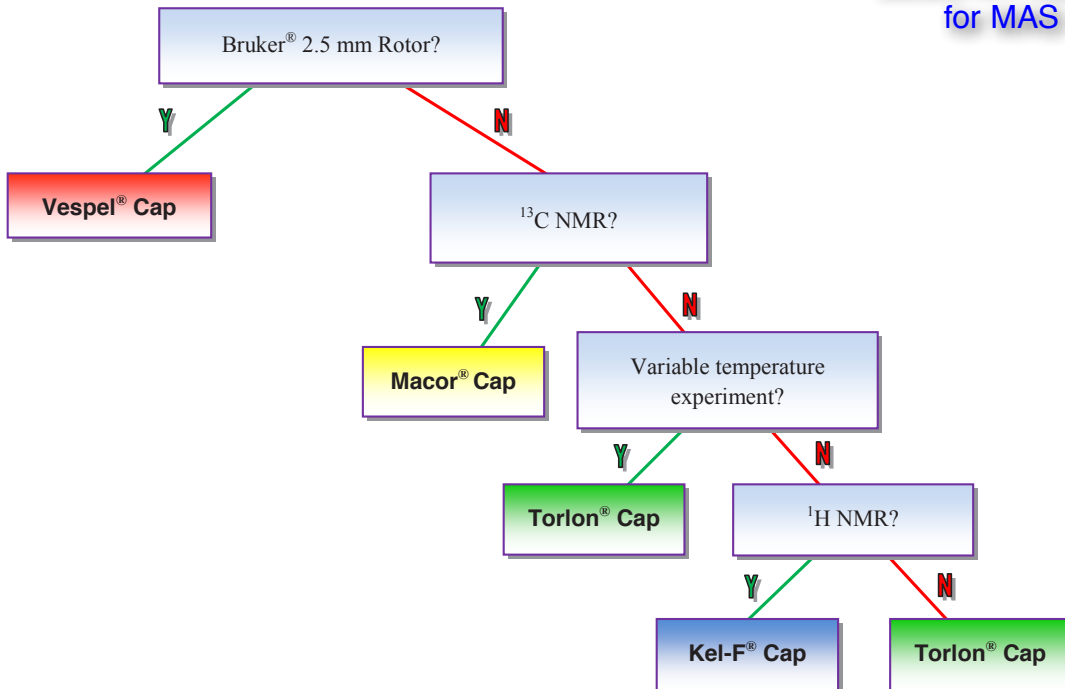
www.Wilmad-LabGlass.com  
Phone: 856-691-3200  
Toll-Free: 800-220-5171

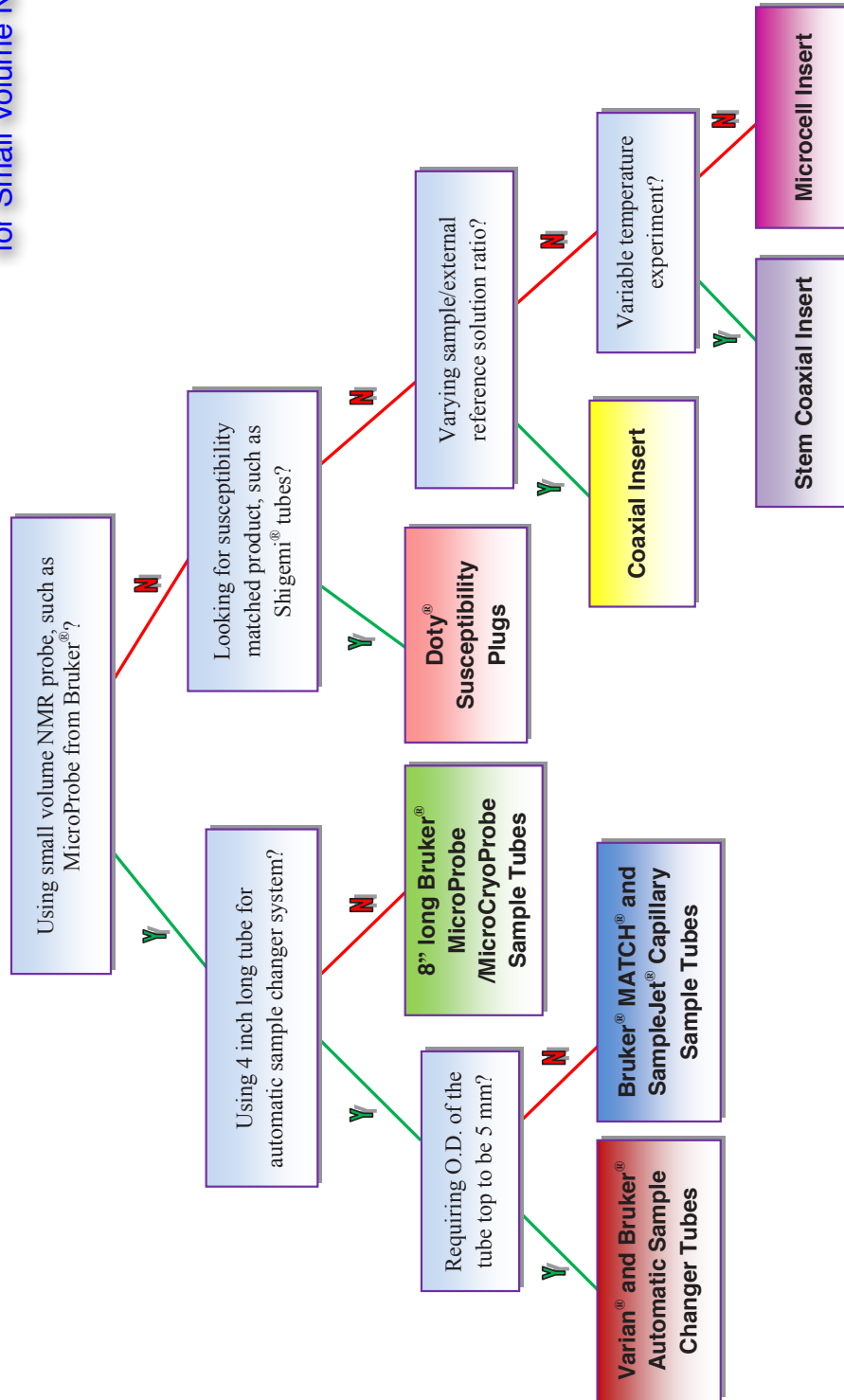
Reprinted 7-09

Wilmad-LabGlass  
Select-A-Product Guide  
for NMR Caps



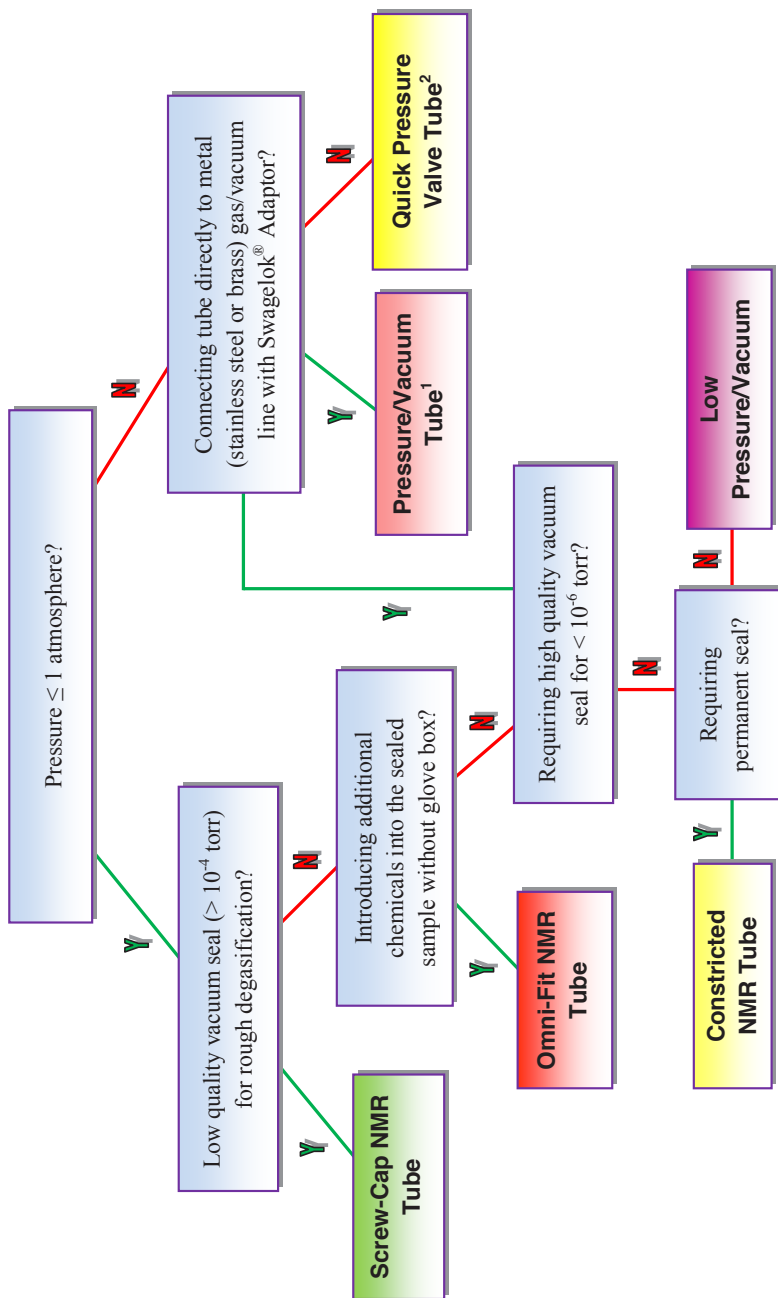
Wilmad-LabGlass  
Select-A-Product Guide  
for MAS Caps





## Wilmad-LabGlass Select-A-Product Guide for Gas-Tight Tubes

Use Universal Solvent Jet NMR Tube Washer WG-7200-2(J2) to wash Low Pressure/Vacuum Tube and Screw-Cap NMR Tube.  
 Use Universal Solvent Jet NMR Tube Washer WG-7200-1(J1) to wash Quick Pressure Valve Tube and Omni-Fit NMR Tube.  
 Use Hamilton Syringe 81420 plus PTFE Needle 90630 to wash Pressure/Vacuum Tube.



Note 1: Please check the maximum pressure for Quick Pressure Valve Tube and Pressure/Vacuum NMR Tube.

Note 2: For any experiment with NH<sub>3</sub> gas or other corrosive gas, we recommend Quick Pressure Valve Tube with Kallrez® O-ring



www.Wilmad-LabGlass.com  
 Phone: 856-691-3200  
 TollFree: 800-220-5171

Reprinted 7-09