

## 3 mm Maximum MAS Spinning Speeds

Use the lower of the speeds listed: considering the rotor, the cap, the temperature and the density maximum speeds

Rotors: The maximum speed must be reduced as the density of the sample increases.			
DI3 Silicon Nitride Rotors Maximum Speed	26 KHz	For sample density = 1	
	24 KHz	For sample density = 3	
Maximum Spinning Speeds (kHz) For <b>Caps</b> at Room Temperature			
Cap Style	DI-3 Spinning at Room Temperature	Cap Material Temperature Range	
Torlon Front Turbine Cap	26 KHz	-30° to 80 °C	
Torlon Rear Tip Cap	26 KHz		
GFT* Front Turbine Cap	26 KHz	-120º to 160 ºC	
GFT* Rear Tip Cap	26 KHz		
Kel-F Front Turbine Cap	11 KHz	-20° to 70 °C	
Kel-F Rear Tip Cap	11 KHz		
*Maximum Spinning Speeds (KHz) For Caps at Extended Temperatures Spinning speeds must be reduced for higher or lower temperatures.			

Glass Filled Torlon (GFT)*	14 KHz <mark>At -80°C</mark>	-120° to 160 °C
Glass Filled Torlon (GFT)*	14 KHz <mark>At +120°C</mark>	-120° to 160 °C

\* Note: **GFT caps** can be used up to 250 °C or down to -170 °C if they are glued in with epoxy. **However the probe must be rated for these extended temperatures.**