INTERNATIONAL CERAMIC ENGINEERING

235 Brooks Street, Worcester, MA 01606
phone: (508) 853-4700 fax: (508) 852-4101 email: sales@intlceramics.com

Engineering Answers in Advanced Ceramics

Property Data Sheet
Cordierite, Mullite and Steatite

Material Properties	*Units of Measure*	*Cordierite*	*Mullite*	*Steatite L-4*	*Steatite L-5*
		PHYSICAL			
Color		Tan	Light Tan	Cream	Tan
Hardness	MOHS scale	7.0	8.0	7.5	7.5
Water Absorption	%	3.0	0	0 - .03	0 - .03
Specific Gravity	g/cc	2.35	---	---	---
		MECHANICAL			
Tensil Strength	PSI	3700	15000	10000	10000
Compressive	PSI	40000	150000	80000	85000
Flexural	PSI	9500	20000	20000	21000
Fracture Toughness	MPa x $m^{1/2}$	---	---	---	---
		THERMAL			
Thermal Conductivity	W/m ^{o}K @ 25 ^{o}C	---	3.5	---	---
Coefficient of Thermal Exp.	25-600 ^{o}C x 10^{-6} per ^{o}C	2.1	5.3	8.3	7.0
Max. usage temperature	^{o}C	1427	1710	1425	1425
		ELECTRICAL			
Te value	Temp @ which resistivity is 1 MEGOHM-CM C	650	---	710	750
Dielectric constant	1 MHZ @ 25 ^{o}C	6.3	---	5.8	6.3
Dielectric strength	Volts/Mil	120	---	240	240
Loss factor	1 MHZ @ 25 ^{o}C	.0076	---	.014	.007

*The information set forth herein is offered by comparison only, and is not to be construed as absolute engineering data or constituting a warranty or representation for which we assume legal responsibility.

800-779-3321

Please visit our website at: **www.intlceramics.com**