Mitsui Chemicals
MITSUI CHEMICALS,INC.
http://www.mitsuichem.com
Shiodome City Center 1-5-2, Higashi-Shimbashi, Minato-ku, Tokyo 105-7117, Japan

Technical Literature B-06

Short-term Heat Resistance of AURUM®

The short-term heat resistance of a resin basically depends greatly on the glass transition temperature of the resin.

The glass transition temperature of AURUM® is as high as 250ºC, or considerably higher than that of the conventional non-crystalline and crystalline engineering plastics. Consequently, AURUM® retains high strength and stiffness up to a temperature range exceeding 200ºC, and therefore AURUM® can be applied to various engineering parts requiring excellent mechanical properties in a high-temperature atmosphere.

The temperature dependence of tensile strength, flexural strength, and flexural modulus of AURUM® in a non-crystalline state is shown below.

Temperature dependece of tensile strength (kg/cm^2)

	Room temp	100˚C	150℃	200˚C	250℃
JGN3030	1,680	1,270	1,080	890	640
JCN3030	2,330	1,780	1,440	1,110	870

Temperature dependence of flexural strength (kg/cm^2)

	Room temp	100˚C	150℃	200˚C	250℃
JGN3030	2,460	2,020	1,760	1,310	850
JCN3030	3,260	2,690	2,200	1,610	1,090

Temperature dependence of flexural mudulus (kg/cm^2)

	Room temp	100˚C	150℃	200˚C	250℃
JGN3030	97,000	84,000	82,000	78,000	69,000
JCN3030	194,000	171,000	171,000	164,000	143,000

The information contained herein is based on the information and data available at this moment, but none of the data or evaluation results contained herein provide any warranty whatsoever.