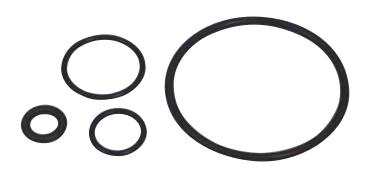
# 370°C class heat resistant rubber FFKM combined with ZEONANO® SG101

ZEONANO® SG101, a super-growth single-walled carbon nanotube manufactured by Zeon Corporation, has greatly improved the heat resistance of rubber materials. FFKM (perfluoroelastomer) is a rubber material with particularly high heat resistance. Zeon Corporation has developed a masterbatch of ZEONANO®SG101 and FFKM. Customers can dramatically improve the heat resistance of FFKM by using this masterbatch.



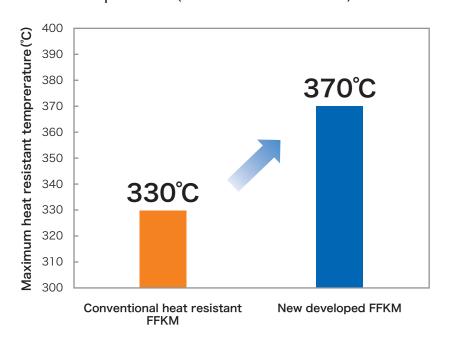
The highest heat resistance compared to the conventional products

[370°C class]

#### **FFKM O-ring**

Conventional heat resistant FFKM(without ZEONANO®SG101): Fluoro-Power®FFSW\*

New developed FFKM(with ZEONANO®SG101): Fluoro-Power®FFSG\*



### Definition of maximum heat resistant temperature

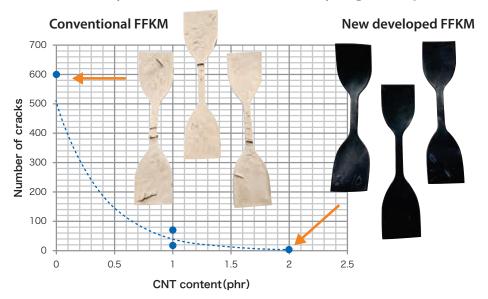
The maximum
temperature of 2hours
treatment, after that the
hardness keeps within ±5
points, keeping minimum
elongation change and elasticity.

\*Fluoro-Power® is a registered trademark of Sakura Seal Co., Ltd. Sakura Seal Co., Ltd. 3-4-10 Midori, Sumida-ku, Tokyo 130-0021 Japan http://www.sakura-seal.co.jp/



## 370°C class heat resistant rubber FFKM combined with ZEONANO® SG101

- The new developed FFKM compound keeps the same mechanical properties as ambient, even after 370°C×2 hours.
- This compound drastically reduces cracks caused by high temperature.



Conventional heat resistant FFKM(without ZEONANO®SG101) : Fluoro-Power®FFSW\* New developed FFKM(withZEONANO®SG101) : Fluoro-Power®FFSG\*

### Figure 1. Specimen appearance after 400°C×2hr heat aging

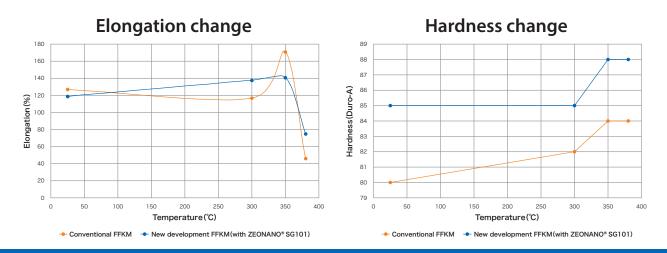


Figure 2. Relationship between heat aging temperature and mechanical property changes

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