

# SPLENDER® Excellent Silica Dispersing Agent

Superior grades of Silica dispersing agents from KAO Corporation, Japan

## Why Choose KAO's Splender?

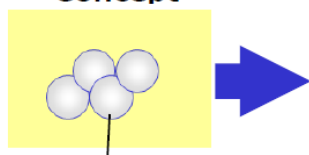
SPLENDER is a specially engineered silica dispersant developed by KAO Corporation, Japan, to address the persistent issue of inefficient silica dispersion in rubber compounds. As a breakthrough solution, R-2000 & R-3000 significantly enhances the performance of silica-filled rubber systems by ensuring even filler distribution, reducing viscosity, and improving mechanical properties.

## Key Principle Behind this:

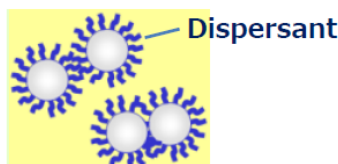
### Plant-derived oil



### Concept



Aggregated silica in rubber



Dispersing silica in rubber

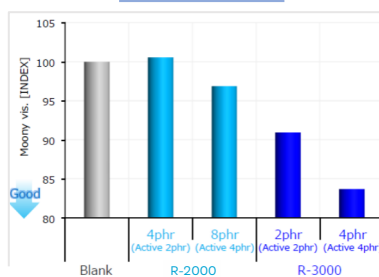
## Unique Advantages R-2000 & R-3000 can Provide

1. Superior Silica Dispersion: Ensures even filler distribution, resulting in lower compound viscosity and improved homogeneity.
2. Reduced Mixing Time: Facilitates faster incorporation of silica, reducing overall mixing time.
3. Outstanding Abrasion Resistance: Reduces abrasion loss, making it suitable for high-durability applications like tires and industrial components.
4. Improved Mechanical Properties: Achieves higher rebound resilience, lower heat build-up, and superior tensile strength.
5. Enhanced Processability: Promotes smoother mixing, better flow, and consistent compound quality.
6. Broad Compatibility with Different Curing Systems: Compatible with both sulfur and peroxide curing systems, adaptable across various elastomers.

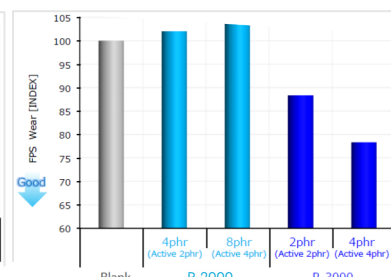
## Test Formulation

Masterbatch		①	②	③
NBR	NBR230	100	←	←
Silica	Nipsil AQ	60	←	←
CP agent	Si69	4.8	←	←
Stearic acid	LUNAC S-70V	2	0 (Active 2)	2
Antioxidant	6PPD	1	←	←
Oil	DOP	20	←	←
Dispersant	R-2000	-	4 (Active 2)	-
Dispersant	R-3000	-	-	2 (Active 2)
Final mix				
Zinc oxide	ZnO	3	←	←
sulfur	S	2	←	←
Accelerator	CBS	1.8	←	←
Accelerator	DPG	1.5	←	←

Mooney Viscosity



Wear Resistivity



## Other Results:

