A close-up photograph of a red car's side mirror. The mirror housing is a vibrant red, matching the car's body paint, and is mounted on a black base. The background is blurred, showing a city street at night with some lights.

SPREDOX D-163

FOR PU COATING

DOXA
CHEMISTRY ENVISIONED

Product Description

Spredox D-163 is polyurethane type dispersant, it provides good viscosity reduction, storage stability, and anti-floating effect.

Specification	
Active	45%
Solvent	BAC/XY/PMA

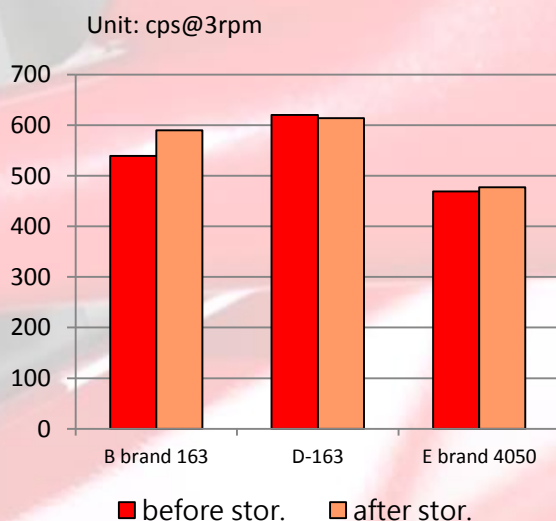
Paste formulation

Millbase	Red 254	Carbon black
Pigment ¹	12	10
Dispersant(100%)	0.8	2.7
Acrylic polyol(60%) ²	50	50
Solvent mix	37.2	37.3
Total	100	100

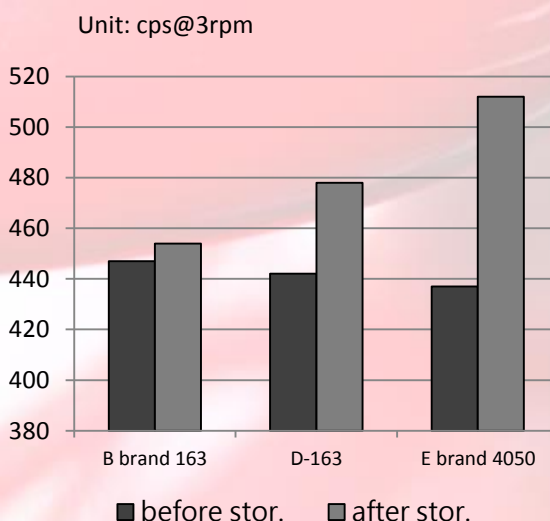
¹Red pigment: Asiafine Blue 2540 Carbon black: Mitsubish MA100

²Acrylic polyol: Elementies FX-2060A

Viscosity and storage stability measured by Millbase



Storage : 70°C 3 days



★Viscosity control

Red: E Brand 4050>B Brand 163>D-163

Black: E Brand 4050>D-163>E Brand 163

Viscosity and storage stability

measured by 1K coating

	Before Stor. cps@3rpm	After Stor. cps@12rpm	%
B brand 163 Red	682	2377	+249%
D-163 Red	730	2013	+175%
E brand 4050 Red	664	2659	+300%

	Before Stor. cps@3rpm	After Stor. cps@12rpm	%
B brand 163 Black	673	2237	+232%
D-163 Black	689	3653	+430%
E Brand 4050 Black	627	3926	+526%

★Thermal Stability

Storage : 70°C 3 days

Red: D-163>B Brand 163>E Brand 4050

Black: B brand 163>D-163>E Brand 4050

Color Test

Mix color paste (Red and black) with white paste and letdown to finished paint. Bake the paint by two different conditions. Make drawdown to compare the color difference.

White paste	%	Paint formulation	Red	Black	White
Pigment ¹	50	Paste	25	25	25
Dispersant ² (100%)	1	Acrylic polyol(60%) ⁴	75	75	75
Acrylic polyol(60%) ³	25	total	100	100	100
Solvent mix	24				
Total	100				

¹Pigment: Venator TR81

²Dispersant: Sprexox D-148

³Acrylic polyol: Elementies FX-2060A

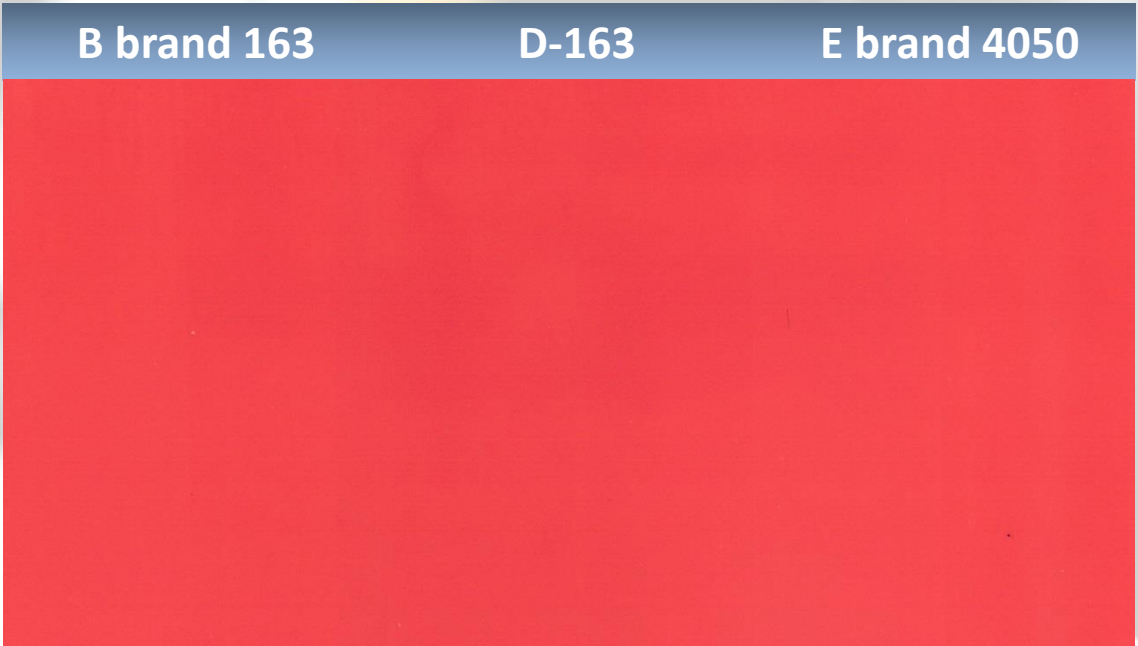
⁴Acrylic polyol: Elementies FX-4660

Mixing ratio

Red paint : White paint = 1:1

Black paint : White paint = 1:4

Storage : 70°C 3 days



Before Stor. After Stor. Before Stor. After Stor. Before Stor. After Stor.



Before Stor. After Stor. Before Stor. After Stor. Before Stor. After Stor.

★△E: E brand 4050>D-163>B brand 163