

VAROX® DBPH-50-EZD and VAROX DBPH-50 SG

Peroxide Accelerators in Silicone

VAROX DBPH-50-EZD is an easily dispersible version of **VAROX DBPH-50** that vulcanizes or crosslinks most elastomers and polyolefins, such as EPR, EPDM, NBR, PE and silicone. The dispersion of **VAROX DBPH-50-EZD** is particularly effective in low durometer compounds. It provides translucent cross-sections in un-pigmented silicone rubber.

VAROX DBPH-50 SG is a 50% active **VAROX DBPH** dispersed in silicone gum. This product form improves the peroxide's incorporation during silicone mill mixing, and eliminates the problems involved in of handling a powder and the waste of fly loss. **VAROX DBPH-50 SG** is a crosslinking agent specifically intended for silicone and fluorosilicone polymer formulations. This unique formulation eliminates dust production during mixing and allows **VAROX DBPH-50 SG** to be used in transparent silicone compounds.

VAROX DBPH-50-EZD and VAROX DBPH-50 SG Peroxide Accelerators:

- Perform equivalently to **VAROX DBPH**
- Provide the clarity of liquid in an
 - easily dispersible powder form (**EZD**) or an
 - easy to handle silicone gum (**SG**).

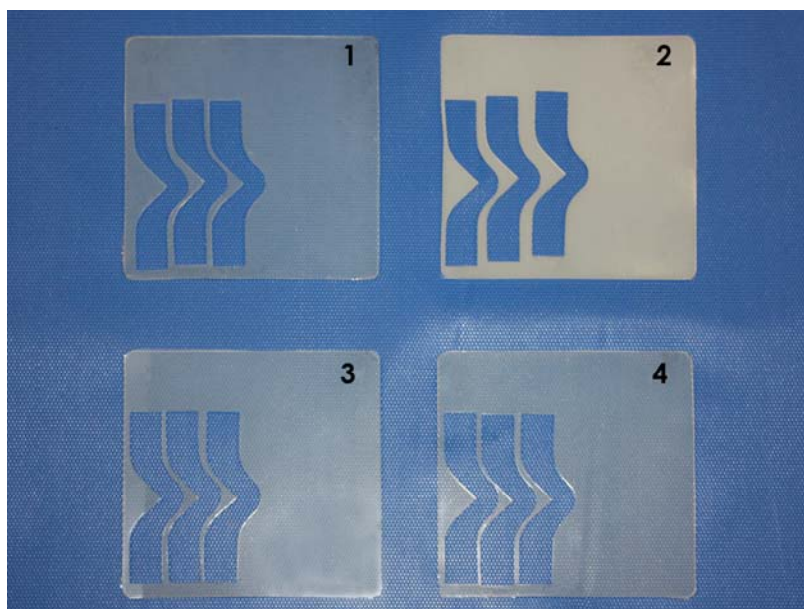


Figure 1: 1= VAROX DBPH, 2=VAROX DBPH-50, 3=VAROX DBPH-50-EZD, 4=VAROX DBPH-50 SG

VAROX® DBPH-50-EZD and VAROX DBPH-50 SG Peroxide Accelerators in Silicone

Ingredients	Compounds (phr)			
	1	2	3	4
Silicone Rubber*	100.00	100.00	100.00	100.00
VAROX® DBPH Peroxide Accelerator	0.50	-	-	-
VAROX DBPH-50	-	1.00	-	-
VAROX DBPH-50-EZD	-	-	1.00	-
VAROX DBPH-50 SG	-	-	-	1.00
Totals	100.50	101.00	101.00	101.00

* 70 Durometer, near-transparent, general purpose, uncatalyzed Silicone Rubber Base

MOONEY SCORCH @ 121.1°C

Minimum Viscosity, mu	17	17	18	18
t ₅ , minutes	60	53	54	54

MDR @ 177°C, 0.5° Arc

Min Torque, ML, dN·m	0.88	0.94	0.95	0.90
Max Torque, MH, dN·m	26.88	26.80	26.72	26.37
t ₅ 1, minutes	0.42	0.43	0.43	0.43
t'90, minutes	2.15	2.08	2.05	1.99

PHYSICAL PROPERTIES

Press Cured 5 min. @ 177°C

100% Modulus, MPa	3.1	3.3	3.4	3.4
Tensile Strength, MPa	10.6	9.3	10.1	11.1
Elongation, %	301	253	276	287
Hardness, Shore A	72	72	73	73

OVEN AGED 70 HOURS @ 225°C

Aged Tensile Strength, MPa	7.5	7.7	7.6	7.2
Aged Elongation, %	125	148	141	119
Aged Durometer, Shore A	83	82	83	84

COMPRESSION SET – METHOD B - 22 HOURS @ 177°C

Set, %	9	10	10	8
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VAROX is a registered trademark of Vanderbilt Chemicals, LLC.
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