## SONGSTAB™ CaZn stabilizers for PVC cables & wires

SONGWON is a leading specialist in high end sheathing and insulation applications for the wire and cable industry

For the past 10 years, SONGWON has been developing, manufacturing and marketing solid, high performance Calcium Zinc (CaZn) stabilizers designed to meet both the demanding requirements of high end sheathing and insulation applications for the cable industry and today's stringent EHS standards.

SONGSTAB<sup>™</sup> CaZn is a wide range of cost effective processing stabilizers that greatly enhance the performance of finished PVC cable compounds, providing excellent heat stability, good electrical properties, and mechanical properties, and minimizing water absorption.



# SONGWON – Extensive experience in the wire and cable industry

#### SONGSTAB™ CaZn stabilizers in a nutshell



Wide range of sheathing and insulation applications

Designed to meet stringent EHS standards

Cutting edge quality

#### Proven reliability



More than 50 years' manufacturing experience in South Korea

Global sales organization and distribution channels in Asia, Europe, North America and Middle East

#### Comprehensive technical expertise



Dedicated PVC testing laboratory in South Korea

Ability to develop and supply tailormade PVC stabilizer solutions

#### Strong commitment



Continuous innovation to meet new PVC industry standards

High emphasis on environmentally compatible solutions

Ø More than 10 years' experience in the development of CaZn systems as alternatives to lead stabilizers

# SONGSTAB<sup>™</sup> Ca-Zn stabilizers generate significant value for wire and cable manufacturers

SONGSTAB™ BP-490 and SONGSTAB™ BP-491 are solid CaZn stabilizers developed for light pigmented and dark pigmented PVC cable formulations respectively. They confer outstanding heat stability to 90°C - 105°C PVC cable compounds, give high Congo red values, have excellent electrical properties, and absorb very little water.

SONGSTAB™ BP-90NE and SONGSTAB™ 91NE are solid CaZn stabilizers developed for light pigmented and dark pigmented PVC cable formulations respectively. They confer outstanding heat stability to 105°C - 125°C PVC cable compounds, give high Congo Red values, have excellent electrical properties, and absorb very little water.

SONGSTAB™ BP-39AC was developed for transparent cable application and is a solid CaZn stabilizer that confers
outstanding heat stability and gives high Congo Red values.

### SONGSTAB™ CaZn stabilizers recommended for PVC cable & wire applications

		Formulation					Two roll mill condition		
		PVC resin [phr]	TOTM [phr]	DIDP [phr]	CaCO3 [phr]	TiO2(R) [phr]	Stabilizer [phr]	Roll temp. (°C)	Mixing time (min)
Light pigmented PVC cable	SONGSTAB™ BP-490	100	-	50	50	1	5	190	5
Dark pigmented PVC cable	SONGSTAB™ BP-491	100	-	50	50	1	5	190	5
Light pigmented PVC cable	SONGSTAB™ BP-90NE	100	50	-	30	1	8	175	5
Dark pigmented PVC cable	SONGSTAB™ BP-91NE	100	50	-	30	1	8	175	5
Transparent PVC cable	SONGSTAB™ BP-39AC	100	-	40	-	-	5	180	5

#### Static heat stability (200°C)

Static heat stability (200°C)		10 min	20 min	30 min	40 min	50 min	60 min	70 min
Light pigmented PVC cable	SONGSTAB™ BP-490					1		
	Competitor A		-				1	
Dark pigmented	SONGSTAB™ BP-491						*	
PVC cable	Competitor A						1.00	1
Light pigmented PVC cable	SONGSTAB™ BP-90NE			233		1		
	Competitor A							
Dark pigmented	SONGSTAB™ BP-91NE							
PVC cable	Competitor A							
Transparent	rent SONGSTAB™ BP-39AC					-	0	
PVC cable	Competitor A							

	Congo Red (200°C)	Water absorption (70°C x 7 days)
SONGSTAB™ BP-490	50.3 min	1,04 %
Competitor A	49.3 min	1,05 %
SONGSTAB™ BP-491	50.0 min	1,13%
Competitor A	49.3 min	1,11 %
SONGSTAB™ BP-90NE	192.3 min	0,78%
Competitor A	157.3 min	0,8%
SONGSTAB™ BP-91NE	189.0 min	0,7%
Competitor A	154.0 min	0,69 %
SONGSTAB™ BP-39AC	79.3 min	-
Competitor A	68.3 min	-
	Competitor A     SONGSTAB™ BP-491     Competitor A     SONGSTAB™ BP-90NE     Competitor A     SONGSTAB™ BP-91NE     Competitor A     SONGSTAB™ BP-91NE     Competitor A     SONGSTAB™ BP-91NE     Competitor A     SONGSTAB™ BP-91NE     Competitor A	SONGSTAB™ BP-49050.3 minCompetitor A49.3 minSONGSTAB™ BP-49150.0 minCompetitor A49.3 minSONGSTAB™ BP-90NE192.3 minCompetitor A157.3 minSONGSTAB™ BP-91NE189.0 minCompetitor A154.0 minSONGSTAB™ BP-39AC79.3 min





For further information, please go to:

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SONGWON provides customers with warranties and representations as to the chemical or technical specifications, compositions and/or the suitability for use for any particular purpose exclusively in individual written agreements.

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Version 1, October 2018

