

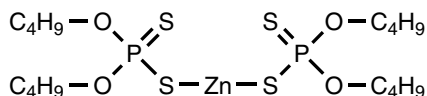
Product Data

VOCOL ZBPD

Zinc O,O-dibutylphosphorodithioate

CAS Reg. No.: 6990-43-8

Molecular weight: 548



FUNCTION

Vocol ZBPD is a fast curing secondary accelerator for NR and EPDM.

MAJOR APPLICATIONS AND PROPERTIES

- Vocol ZBPD is mainly used as an accelerator in non-blooming, relative low cost, fast curing systems for EPDM.
- When used in combination with Perkacit MBTS or sulfenamides in NR compounds, Vocol ZBPD dramatically improves reversion resistance. Because of its non-amine based structure, Vocol ZBPD can be used as a component in non-N-nitrosamine generating cure systems.
- Vocol ZBPD is non-discoloring and non-staining.
- Vocol ZBPD is regulated for use in articles in contact with food as specified under BgVV XXI, Category 4. Vocol ZBPD is not regulated for use in FDA food contact applications.

COMPOUNDING INFORMATION

Vocol ZBPD can be used in NR and EPDM at levels of 1.0 to 4.0 phr (based on pdr-75%) as a secondary accelerator in combinations with sulfenamides, thiazoles and thiurams. When used in NR to improve reversion resistance, care must be taken to select the level of Vocol ZBPD to obtain the best compromise between scorch and reversion resistance. Since Vocol ZBPD is non-blooming and non-discoloring, it can be used in translucent, fast curing NR shoe sole compounds.

Typical formulations are:

	NR (phr)	EPDM (phr)
Sulfur	1.0	1.0
Vocol ZBPD-pdr-75%	2.0	2.7
Santocure CBS	0.6	--
Santocure TBBS	--	2.0
Perkacit TMTD	--	1.0

HANDLING PRECAUTIONS

For detailed information on toxicological properties and handling precautions please refer to the current Safety Data Sheet. This information sheet can be downloaded from our web site or requested from the nearest Flexsys office and should be consulted before handling this product.

STORAGE RECOMMENDATIONS

Store Vocol ZBPD in a cool, dry, well ventilated area, avoiding exposure of the packaged product to direct sunlight. Upon lengthy storage crystals can form in the liquid. These crystals will dissolve by gently warming to 40-50°C while stirring or rolling the drum.

PRODUCT INFORMATION

Vocol ZBPD Product form	liq liquid	pdr-75% 75% powder on silica	
<u>PRODUCT SPECIFICATIONS</u>			<u>Test method</u>
Appearance	clear liquid	off white powder	FF97.5
Odor	no foul odor	-	FF97.10
Assay (%)	-	73.5-76.5	FGr97.2
Sulfur (%)	22.0-23.6	-	ASTM D4927
Zinc (%)	11.4-13.2	-	FCp97.4
Phosphorous (%)	10.5-11.7	7.7-9.0	FCol97.1
Insoluble in methanol (%) (includes the carrier)	-	23.5-26.5	FGr97.2
pH value	≥4.0	-	FPot97.1
Specific gravity at 15.6°C	1.21-1.31	-	FF97.8
<u>TYPICAL PROPERTIES</u>			
Density at 25°C (kg/m ³)	-	1600	

For further information please contact your local Flexsys office or regional Flexsys headquarters:

Regional Headquarters	:	Brussels	Akron	Singapore
Tel.	:	+32 2 714 32 11	+1 330 666 41 11	+65 872 28 08
Fax	:	+32 2 714 32 32	+1 330 668 83 45	+65 872 28 18

All product names are registered trade marks.

ZBPD2.AC/1000

The information and recommendations in this publication are provided without warranty as to completeness, correctness or suitability for any particular purpose. The user of this publication assumes responsibility for and Flexsys shall not be liable for any injury, loss or damage arising from any use or reliance upon its contents.

©Copyright Flexsys 2000.