



## Product Data

### PERKACIT ZDBC

Zinc dibutyldithiocarbamate

CAS Reg. No.: 136-23-2

Molecular weight: 474

### FUNCTION

Perkacit ZDBC is a very fast primary or secondary (ultra) accelerator for natural and synthetic rubber. It is also a very rapid accelerator for NR and SBR latices. Additionally it is an antioxidant in rubber adhesive systems.

### MAJOR APPLICATIONS AND PROPERTIES

- Perkacit ZDBC is used as secondary ultra accelerator for thiazole and sulfenamide cure systems in general purpose polymers (NR, SBR, IIR, EPDM). It can be used as a primary accelerator in specialty applications as well as in latex.
- In latex applications Perkacit ZDBC is mainly used in transparent goods and in prevulcanized latex.
- An additional application is as an antioxidant in adhesive systems.
- Perkacit ZDBC gives faster cures than Perkacit ZDEC or Perkacit ZDMC.
- It should be noted that in the application of Perkacit ZDBC N-nitrosodibutylamine can be formed by the reaction of dibutylamine, a decomposition product, with nitrosating agents (nitrogen oxides).
- Perkacit ZDBC is regulated for use in articles in contact with food as specified under FDA 21 CFR 175.105, 178.2010, 175.300, 177.1210, 177.2600 and under BgVV XXI, Categories 1-4 and "Sonderkategorie".

### COMPOUNDING INFORMATION

In NR latex, when used as a primary accelerator 1 phr of Perkacit ZDBC with 2.5 phr sulfur is a good starting point.

In EPDM Perkacit ZDBC has the highest solubility of all dithiocarbamates, offering the lowest blooming effect. An acceptable starting point for a low set non-blooming EPDM compound is Perkacit ZDBC 2.0, Perkacit TMTD 0.8, Perkacit DPTT 0.8 and Sulfasan DTDM 2.0 phr.

In rubber cured in contact with polyester textiles Perkacit ZDBC is preferably used over other dithiocarbamates.

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## 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 Perkacit ZDBC in a cool, dry, well ventilated area, avoiding exposure of the packaged product to direct sunlight.

## PRODUCT INFORMATION

Perkacit ZDBC Product form	pdr powder	pdr-d dust suppressed powder	
<b><u>PRODUCT SPECIFICATIONS</u></b>			<u>Test method</u>
Appearance	white to off white powder	white to off white powder	FF97.5
Zinc content (%)	13.8-14.8	13.5-14.5	FCp97.3
Melting point, initial (°C) min	100	98	FF83.9
Melting point, final (°C)	105-112	105-112	FF83.9
Heat loss (%) max.	0.5	0.5	FGr97.7
Water solubles (%) max.	0.5	0.5	FF83.12
Additive (%)	-	1.0-2.0	FGr83.6
Residue on 150 µm sieve (%) max.	0.1	0.1	FF83.8
Residue on 63 µm sieve (%) max.	0.5	0.5	FF83.8
<b><u>PHYSICAL PROPERTIES</u></b>			
Density at 20°C (kg/m <sup>3</sup> )	1270	1270	
Bulk density (kg/m <sup>3</sup> )	310-350	330-370	
Compacted bulk density (kg/m <sup>3</sup> )	400-440	400-440	

Perkacit ZDBC is also available as 80% masterbatch.

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ZDBC3.AC/1000

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