



FLEXSYS

Accelerators

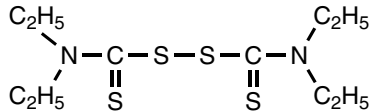
Product Data

PERKACIT TETD

Tetraethylthiuram disulfide

CAS Reg. No.: 97-77-8

Molecular weight: 297



FUNCTION

Perkacit TETD is used as a primary or secondary (ultra) accelerator in multiple blend accelerator systems with thiazoles and sulfenamides. It is also used as a vulcanizing agent (sulfur donor) in most of the sulfur cured elastomers and as a peptizing agent in sulfur modified polychloroprenes.

MAJOR APPLICATIONS AND PROPERTIES

- Perkacit TETD offers fast vulcanization and gives more scorch delay than Perkacit TMTD.
- It gives an excellent vulcanization plateau with good heat aging and compression set resistance when used in sulfurless vulcanization systems and EV systems.
- In EPDM, Perkacit TETD is a valuable secondary accelerator.
- Perkacit TETD gives excellent dispersions in soft compounds due to its low melting point.
- Perkacit TETD is non-staining and non-discoloring; excellent colors are obtained in non-black vulcanizates.
- It should be noted that in the application of Perkacit TETD N-nitrosodiethylamine can be formed by the reaction of diethylamine, a decomposition product, with nitrosating agents (nitrogen oxides).
- Perkacit TETD is regulated for use in articles in contact with food as specified under FDA 21 CFR 177.2600, 175.105 and under BgVV XXI, Categories 1-4.

COMPOUNDING INFORMATION

In NR and SBR Perkacit TETD is an effective secondary accelerator at a level of 0.1 to 0.3 phr. When used in combination with sulfenamide accelerators, the sulfenamide can be reduced by 0.3 phr for each 0.1 phr of Perkacit TETD to give equal states of cure.

In NBR, EPDM and BR Perkacit TETD can be used as a secondary accelerator at levels of 0.5 to 2.0 phr.

As a sulfur donor Perkacit TETD contains 11% available sulfur. A combination of Perkacit TETD 1.0 phr, Santocure CBS 1.0 phr and Sulfasan DTDM 1.0 phr results in both good processing and performance characteristics without bloom and with acceptable scorch.

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 TETD in single stacked pallets in a cool, dry, well ventilated area, avoiding exposure of the packaged product to direct sunlight. Double stacking of palletized material and/or exceeding 35°C can result in unusual compaction of product.

PRODUCT INFORMATION

Perkacit TETD Product form	pdr-s crystalline powder	pdr powder	grs-3mm 3mm granules	
<u>PRODUCT SPECIFICATIONS</u>				<u>Test method</u>
Appearance	off white fine crystals	off white powder	off white granules	FF97.5
Assay (%) min.	99.0	99.0	98.0	FPot83.8
Melting point, initial (°C) min.	64	64	64	FF83.9
Melting point, final (°C)	69-73	69-73	69-73	FF83.9
Heat loss (%) max.	0.3	0.3	0.3	FGr97.7
Ash (%) max.	0.3	0.3	0.3	FGr90.9
Residue on 150 µm sieve (%) max.	-	0.1	-	FF83.8
<u>TYPICAL PROPERTIES</u>				
Density at 20°C (kg/m ³)	1310	1310	1310	
Bulk density (kg/m ³)	610-650	340-380	385-440	
Compacted bulk density (kg/m ³)	700-740	430-470	415-465	

Perkacit TETD is also available as 80% masterbatch.

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

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TETD2.AC/1000

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