

Technical Data Sheet Duralink™ HTS

Product Description

Chemical name: Hexamethylene-1,6-bis(thiosulfate), disodium salt, dihydrate

Molecular weight: 390

Duralink™ HTS is used in sulfur based vulcanization systems to generate hybrid crosslinks which provide increased retention of physical and dynamic properties when exposed to anaerobic conditions at elevated temperatures such as those experienced during overcure, when using high curing temperatures or during product service life.

MAJOR APPLICATIONS AND PROPERTIES:

- Duralink HTS is used with conventional or semi-efficient sulfur based vulcanization systems to generate thermally stable hybrid crosslinks which provide excellent dynamic flexibility in NR, IR, SBR, BR and blends of these polymers.
- Duralink HTS is used in SBR based compounds to modify the viscoelastic dynamic properties.
- Duralink HTS is used as an adhesion promoter to enhance the adhesion between rubber compounds and brass plated steel reinforcing materials.
- A slight reduction in scorch safety and modulus and a slight increase in cure time may be observed when using Duralink HTS in various compounds.
- Duralink HTS is non-staining and non-discoloring in most compounds.

Typical Properties

Property	Typical Value, Units	
General		
Form	Dust suppressed fine powder	
Density		_
@ 25°C	1390 kg/m ³	
Residue on 150 µM sieve	<0.05 %	

Compounding Information

The use of Duralink™ HTS at 1-2 phr levels provides enhanced network stabilization upon thermal-oxidative aging in natural rubber, SBR and BR based elastomer or blend compounds. Thus, properties which depend upon network characteristics and dynamic mechanical properties including tear, fatigue, modulus, grip characteristics and rolling resistance are better maintained throughout the service life of the article. These benefits are apparent in conventional, semi-efficient and efficient vulcanization systems.

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 website or requested from the nearest Flexsys office and should be consulted before handling this product.

Storage and Shelf Life

Store Duralink™ HTS in single stacked pallets in a cool, dry, well-ventilated area, avoiding exposure of the packaged product to direct sunlight. Prolonged double stacking of palletized material can result in unusual compaction of product.

The shelf life of Duralink HTS is 18 months from the date of manufacture, based on the recommended handling and storage conditions. Once the material has surpassed shelf life, please contact us if you would like to receive our suggestions for material re-verification, based on key product characteristics.

Comments

Properties reported here are typical of average lots. Flexsys makes no representation that the material in any particular shipment will conform exactly to the values given.

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