



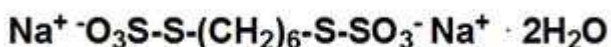
Product Data Sheet

Duralink™ HTS

CAS No. 5719-73-3

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.

Compounding Information

Duralink™ HTS can be used at 1.0 to 3.0 phr with conventional and semi-efficient sulfur based cure systems to provide improved thermal resistance and dynamic properties. The benefits of a Duralink™ HTS based vulcanization system can be maximized by optimizing the whole cure system for specific properties. Suggested starting point formulations (in phr) include:

Ingredient	Overcure	High Temperature Curing	Dynamic Heat Build-up	Overall Compromise
Duralink HTS	1.8	1.6	3.0	2.8
Sulfur	2.2	1.0	1.3	1.1
Accelerator	1.6	2.3	1.1	1.0
Stearic acid	2.7	0.75	2.4	1.6

Duralink™ HTS can be used at 1.0 to 1.5 phr as a bonding promoter for rubber based compounds to brass plated steel reinforcing materials.

Duralink™ HTS is used at 1.0 to 2.0 phr to modify the dynamic properties of SBR based compounds such as treads where it is desirable to improve the compromise between wet grip, ice grip and rolling resistance.

Typical Properties

Form	Dust suppressed fine powder
Density @ 25°C	1390 kg/m ³
Residue on 150 µM sieve	<0.05%

Storage

Store Duralink™ HTS in a cool, dry, well ventilated area, avoiding exposure of the packaged product to direct sunlight.

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 Eastman office and should be consulted before handling this product.

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