

## **Calibration Standards for ASTM D 5504 Standard Test Method for the Determination of Speciated Sulfurs in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence.**

DCG has available NIST traceable by weight, gravimetrically prepared calibration standards for ASTM D 5504. This test method is used primarily for the determination of speciated volatile sulfur containing compounds in high methane content gaseous fuels such as natural gas and related fuels. All standards, in addition to being gravimetrically prepared and NIST traceable by weight, have been verified by one or more analytical methods. The sulfur compounds listed below are sometimes found in high methane content gaseous fuels such as natural gas.

**Hydrogen sulfide (H<sub>2</sub>S)**  
**Carbonyl sulfide (COS)**  
**Sulfur Dioxide (SO<sub>2</sub>)**  
**Methyl Mercaptan (Methanethiol)**  
**Ethyl Mercaptan (Ethanethiol)**  
**Dimethyl Sulfide (DMS) (Methyl Sulfide)**  
**Carbon Disulfide (CS<sub>2</sub>)**  
**Isopropyl Mercaptan (2-Propanethiol) (I-Propanethiol)**  
**Tert-Butyl Mercaptan (2-Methyl-2-Propanethiol)**  
**N-Propyl Mercaptan (1-Propanethiol)**  
**Ethyl Methyl Sulfide (Methyl Ethyl Sulfide)**  
**Thiophene / Sec- Butyl Mercaptan (2- Butanethiol) (S-Butanethiol) (1-Methyl-1-Propanethiol)**  
**Isobutyl Mercaptan (2 -Methyl -1-Propanethiol)**  
**Diethyl Sulfide (Ethyl Sulfide)**  
**N- Butyl Mercaptan (1-Butanethiol) (N-Butanethiol)**  
**Dimethyl Disulfide (Methyl Disulfide)**  
**2-Methylthiophene**  
**3-Methylthiophene**  
**Diethyl Disulfide (Ethyl Disulfide)**  
**Benzothiophene**

Standards can be customized using any or all of the sulfur compounds listed above. Other sulfur compounds are available upon request. Standards can be prepared in the ppb to percent range in mole, weight or total sulfur by weight concentrations. Please consult with a DCG customer service representative for assistance with sulfur compatibilities and background matrices. As with all DCG products, we will provide excellent technical support before, during and after your standard purchase. DCG chemists are ready and available to assist you with your sulfur questions and analytical needs. Speciated sulfur standards are also available in liquid backgrounds – [See Brochure for ASTM D 5623 for more information.](#)

Prices are subject to change

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**Chromatographic Reference Materials**