Europa Bioproducts Ltd

15-17 North Street • Wicken
Ely • Cambridge • CB7 5XW

Tel: 0044 (0)1353-721118
Fax: 0044 (0)1353-624589

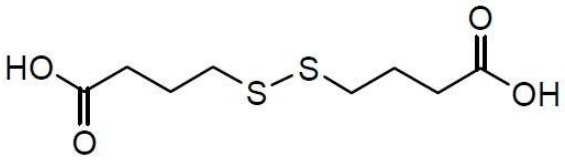
4, 4 E Dithiodibutyric acid

Item#	Unit Size
D524-10	500 mg

Chemical Name: 4,4 EDithiodibutyric acid
CAS: 2906-60-7
Appearance: White Crystalline powder
Purity: ≥97.0% (HPLC)
MW: 238.33, $C_8H_{14}O_4S_2$
Application: SAM preparation, carboxylate coating

Storage Condition: ambient temperature, protect from metal
Shipping Condition: ambient temperature

Product Description of Carboxyallanedisulfides

Product Description of Carboxyallanedisulfides Carboxyalkyldisulfides are oxidized carboxyalkanethiols. They form SAMs similar to the carboxyalkanethiols, but are more stable than thiols. Kanayama and others formed SAMs of 4,4′-dithiodibutyric acid on gold colloids or gold electrodes and introduced phenylboronic acid moieties to its terminus. They succeeded in recognizing various sugars by surface-enhanced Raman spectroscopy (SERS) and cyclic voltammetry (CV) using these SAMs. Takagi and coworkers fixed dinitrophenyl (DNP) groups on carboxyalkyl-disulfide SAMs. They detected an anti-DNP antibody by electrical impedance measurement. This technique could be applied to impedimetric sensing of proteins. Delamarche and his coworkers fabricated 10-carboxydecyl disulfide SAMs on a gold substrate and introduced a photoactivatable benzophenone moiety to the termini. After attaching a protein (IgG), it was tested by a variety of characterization techniques (including ellipsometry, Xray photoelectron spectroscopy and AFM).

Structural Formula