

A Molecules

The molecules used in this work are listed here with their structure formula, a ball-and-stick representation to indicate the geometry and spatial consumption of the molecules and their physical chemical properties.

Stilbene

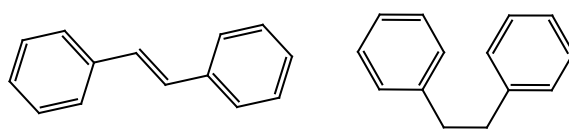


Figure A.1: *Structure formula of stilbene.*

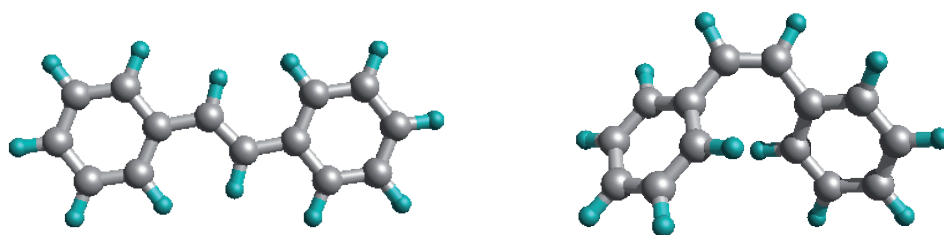


Figure A.2: *Ball-and-stick model of stilbene.*

	trans	cis
CAS number	103 30 0	645 49 8
Molecular Weight	180.25g/mol	
Density	0.97g/ml	1.011g/ml
Melting Point	124°C	below RT
Boiling Point	306°C	83°C
Reference	Beil. 5,IV,2156	Beil. 5,IV,2155

Table A.1: *Physical and chemical properties of stilbene*[253].

(4,4')-Stilbene dicarboxylic acid

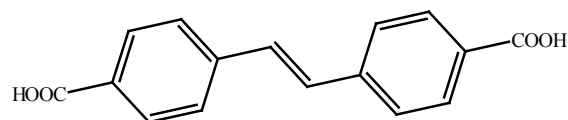


Figure A.3: Structure formula of 4,4'-Stilbene-dicarboxylic acid.

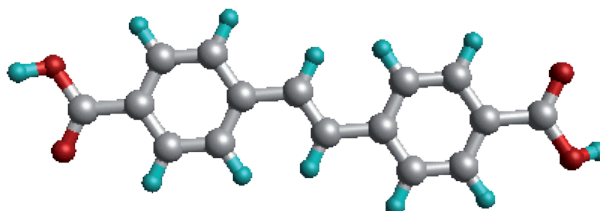


Figure A.4: Ball-and-stick model of 4,4'-Stilbene-dicarboxylic acid.

	trans
CAS number	103 31 2
Molecular Weight	268.27g/mol
Melting Point	> 300°C

Table A.2: Physical and chemical properties of (4,4')-Stilbene dicarboxylic acid.

Tartaric Acid

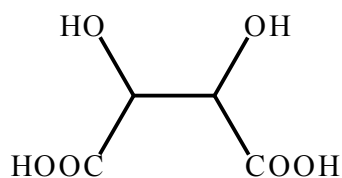


Figure A.5: Structure formula of tartaric acid.

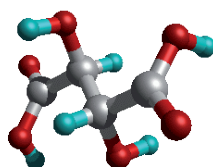


Figure A.6: Ball-and-stick model of Tartaric Acid.

	(R,R)	(S,S)	(R,S)
CAS Number	87 69 4	147 71 7	133 37 9
Molecular Weight		150.09g/mol	
Melting Point	173°C	173°C	211°C
Optical Activity	+12°	-12°	0°
Reference	Beil. 3,IV,1219	Beil. 3,IV,1229	Beil. 3,IV,1229

Table A.3: Physical and chemical properties of tartaric acid[253].

Alanine

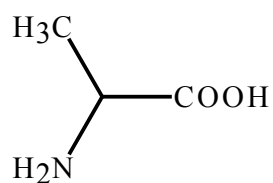


Figure A.7: Structure formula of alanine.

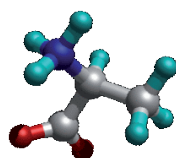


Figure A.8: Ball-and-stick model of Alanine.

	(R)	(S)
CAS Number	338 69 2	56 41 7
Molecular Weight	89.09g/mol	
Melting Point	291°C	291°C
Optical Activity	-14°	+14°
Reference	Beil. 4,IV,2480	Merck 13,203

Table A.4: Physical and chemical properties of alanine[253].

Cysteine

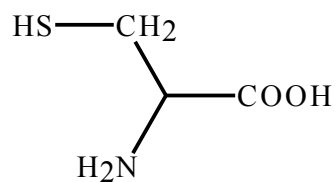


Figure A.9: Structure formula of cysteine.

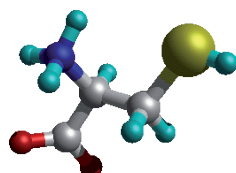


Figure A.10: Ball-and-stick model of Cysteine.

	(R)	(S)
CAS Number	52 90 4	921 01 7
Molecular Weight	121.16g/mol	
Melting Point	220°C	220°C
Optical Activity	+7.6°	-7.6°
Reference	Beil. 4,IV,3144	Beil. 4,III,1618

Table A.5: Physical and chemical properties of cysteine[253].