



>>Entry Name: Phenyl vinyl sulfide, 8CI

ENTRY UNDER REVIEW

Synonym(s): (Ethenylthio)benzene, 9CI. Phenylthioethene

CAS Registry Number: 1822-73-7

Related CAS Registry Numbers(s): 88180-53-4 89299-85-4 89299-86-5

PhSCH=CH<sub>2</sub>

Molecular Formula: C<sub>8</sub>H<sub>8</sub>S

Molecular Weight: 136.217

Accurate Mass: 136.03467

Percentage Composition: C 70.54%; H 5.92%; S 23.54%

Source/Synthesis: Component of beef aroma

Use/Importance: Reagent for two-carbon homologations in synth. of carbonyl compds., many other synthetic applications. Polym. intermed.

Boiling Point: Bp 201°. Bp<sub>25</sub> 94-97°

Refractive Index: n<sub>D</sub><sup>20</sup> 1.5883

Other Data: Undergoes radical polym. Q/e values for copolym., Q 0.33, e –0.99

Aldrich: 22647-5

Fluka: 79290

>>Derivative: S-Oxide

Synonym(s): (Ethenylsulfinyl)benzene, 9CI. Phenyl vinyl sulfoxide

CAS Registry Number: 20451-53-0

Molecular Formula: C<sub>8</sub>H<sub>8</sub>OS

Molecular Weight: 152.217

Accurate Mass: 152.029585

Percentage Composition: C 63.13%; H 5.30%; O 10.51%; S 21.07%

Use/Importance: Reagent for introduction of –CH=CH– in cycloaddn.

Boiling Point: Bp<sub>1.5</sub> 105-110°

Density: d<sup>20</sup> 1.139

Refractive Index: n<sub>D</sub><sup>20</sup> 1.5865

Other Data: Stable for several days at 180°. Opt. active forms known. Undergoes anionic homopolym. and copolym., e.g. with Styrene [HHX01-F](#)

Aldrich: 21330-6

Fluka: 79295

>>Derivative: S,S-Dioxide

Synonym(s): (Ethenylsulfonyl)benzene, 9CI. Phenyl vinyl sulfone

CAS Registry Number: 5535-48-8

Molecular Formula: C<sub>8</sub>H<sub>8</sub>O<sub>2</sub>S

Molecular Weight: 168.216

Accurate Mass: 168.0245

Percentage Composition: C 57.12%; H 4.79%; O 19.02%; S 19.06%

Use/Importance: Reagent for introduction of - CH<sub>2</sub>CH<sub>2</sub> - in cycloaddn.

Physical Description: Cryst. (hexane)

Melting Point: Mp 66-67°

Aldrich: 24171-7

Fluka: 79293

References: