

Some common molecules and their critical diameters

Molecule	Critical Diameter (Å)	Molecule	Critical Diameter (Å)
Helium	2.0	Propylene	5.0
Hydrogen	2.4	Ethyl mercaptan	5.1
Acetylene	2.4	1-Butene	5.1
Oxygen	2.8	trans-2-Butene	5.1
Carbon monoxide	2.8	1,3-Butadiene	5.2
Carbon dioxide	2.8	Chlorodi fluoromethane	5.3
Nitrogen	3.0	Thiophene	5.3
Water	3.2	Isobutane to isodocosane	5.6
Ammonia	3.6	Cyclohexane	6.1
Hydrogen sulfide	3.6	Benzene	6.7
Argon	3.8	Toluene	6.7
Methane	4.0	p-Xylene	6.7
Ethylene	4.2	Carbon tetrachloride	6.9
Ethylene oxide	4.2	Chloroform	6.9
Ethane	4.4	Neopentane	6.9
Methanol	4.4	m-Xylene	7.1
Methyl mercaptan	4.5	o-Xylene	7.4
Propane	4.9	Triethylamine	8.4
n-Butane to n-docosane	4.9		