

## ABBREVIATIONS & SYMBOLS

Symbol	Definition
<b>A</b>	
Å	Angstrom(s)
AA	Atomic Absorption
abs	absolute
ACGIH	American Conference of Governmental Industrial Hygienists
ASTM	American Society for Testing Materials
atm	atmosphere(s)
avg	average
<b>B</b>	
bp	boiling point
Btu	British thermal unit(s)
<b>C</b>	
CAA	Clean Air Act
cal	calorie(s)
CAS	Chemical Abstract Services
ccm	cubic centimeter(s) per minute
ccs	cubic centimeter(s) per second
CEM	Continuous Emission Monitor
cf	cubic feet
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
cm	centimeter(s)
cm <sup>2</sup>	square centimeter
cm <sup>3</sup> , cc	cubic centimeter
COA	Certificate of Analysis
COC	Certificate of Conformance
CP	Chemically Pure
C <sub>p</sub>	specific heat at constant pressure
C <sub>v</sub>	specific heat at constant volume
C <sub>v</sub>	coefficient of flow
°C	degree(s) Celsius
<b>D</b>	
DID	Discharge Ionization Detector
DIN	Deutsche Industrie Normen (German Industrial Standards)
DISS	Diameter Index Safety System
DOT	Department of Transportation
<b>E</b>	
ea	each
ECD	Electron Capture Detector
EPA	Environmental Protection Agency
<b>F</b>	
FID	Flame Ionization Detector
FNPT	Female National Pipe Thread
F.O.B.	Freight on Board
FPD	Flame Photometric Detector
FPT	Female Pipe Thread
ft	foot, feet
ft <sup>3</sup> , cu ft	cubic foot (feet)
FTIR	Fourier Transform Infrared Spectrometer or Spectroscopy
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
°F	degree(s) Fahrenheit

Symbol	Definition
<b>G</b>	
g	gram(s)
gal	gallon(s)
GC	Gas Chromatography or Chromatograph
GMIS	Gas Manufacturers Intermediate Standard
GPA	Gas Processors Association
<b>H</b>	
Hall	Electrolytic Conductivity Detector
HAP	Hazardous Air Pollutants
HID	Helium Ionization Detector
hr	hour
Hz	hertz
<b>I</b>	
ICP	Inductively Coupled Plasma (Spectroscopy)
ID	identification or inside diameter
in, ins	inch(es)
in <sup>3</sup> , cu in	cubic inch(es)
<b>J</b>	
J	joule
<b>K</b>	
K	Kelvin
kg	kilogram(s)
kPa	Kilopascal(s)
°K	degree(s) Kelvin
<b>L</b>	
L	liter(s)
lb	pound(s)
LC	Liquid Chromatography
Lpm	liters per minute
<b>M</b>	
μ	micron(s), 10 <sup>-6</sup> m
m <sup>3</sup>	cubic meter(s)
mA	milliampere
max	maximum
mg	milligram(s)
min	minute(s)
ml	milliliter(s)
mm	millimeter(s)
MNPT	Male National Pipe Thread
mol.wt.	molecular weight
MOS	Metal Oxide Semiconductor
MPT	Male Pipe Thread
mp	melting point
MS	Mass Spectrometry
MSD	Mass Selective Detector
MVCR	Male VCR
MVFS	Male Vacuum Face Seal
MW	molecular weight
<b>N</b>	
N/A	not applicable
nbp	normal boiling point
NDIR	Non-Dispersive Infrared Analyzer
NDUV	Non-Dispersive Ultraviolet Analyzer
NER	normal evaporation rate
NF	National Formulary
NFPA	National Fire Protection Association

# TECHNICAL DATA

## ABBREVIATIONS & SYMBOLS

Symbol	Definition
NIST	National Institute of Standards and Technology
nm	nanometer(s)
No	number
nom	nominal
NOS	not otherwise specified
NPD	Nitrogen/Phosphorous Detector
NPT	National Pipe Thread
NTP	Normal temperature and pressure
NTRM	NIST Traceable Reference Material
NMR	Nuclear Magnetic Resonance Spectroscopy
<b>O</b>	
OD	outside diameter
Ohm-cm	ohms centimeter
OSHA	Occupational Safety and Health Administration
oz	ounce(s)
<b>P</b>	
Pa	pascal(s)
PID	Photo Ionization Detector
ppb	part(s) per billion
ppba	part(s) per billion atomic
ppbv	part(s) per billion by volume
ppbw	part(s) per billion by weight
ppm	part(s) per million
ppma	part(s) per million atomic
ppmv	part(s) per million by volume
ppmw	part(s) per million by weight
ppt	part(s) per trillion
ppta	part(s) per trillion atomic
pptv	part(s) per trillion by volume
pptw	part(s) per trillion by weight
psi	pound(s)-force per square inch
psia	pound(s)-force per square inch absolute
psig	pound(s)-force per square inch gauge
<b>R</b>	
Ra	Roughness average
RFO	restricted flow orifice
°R	degree(s) Rankine

Symbol	Definition
<b>S</b>	
scc	standard cubic centimeters
sccm	standard cubic centimeters per minute
sccs	standard cubic centimeters per second
scfh	standard cubic feet per hour
scfm	standard cubic feet per minute
scfs	standard cubic feet per second
sec	second(s)
SFC	Supercritical Fluid Chromatography
SFE	Supercritical Fluid Extraction
slpm	standard liters per minute
sp. gr.	specific gravity
sp. vol.	specific volume
SRM	Standard Reference Materials
SS	Stainless Steel
Stn. Stl.	Stainless Steel
STEL	Short Term Exposure Limit
STP	standard temperature and pressure
<b>T</b>	
TCD	Thermal Conductivity Detector
TEA	Transversely Excited Atmosphere
THC	Total Hydrocarbon Content
TLV	Threshold Limit Value
tp	triple point
TPH	Total Petroleum Hydrocarbons
TWA	Time Weighted Average
<b>U</b>	
UHP	Ultra High Purity
UN	United Nations
USP	United States Pharmacopoeia
<b>V</b>	
VAC	volts alternating current
VDC	volts direct current
VOC	Volatile Organic Compounds
vol	volume
vol%	volume percent
<b>W</b>	
w.c.	water column pressure
wt.	weight
wt%	weight percent
wt. ppm	weight parts per million
<b>Y</b>	
yd	yard(s)
>	greater than
<	less than