

Abbreviations

%	Percent
~	approximately
"	Inch(es)
&	and
>	Greater than
<	Less than
±	Plus or Minus
\$	(U.S.) Dollars
A	(Inhalation) Absorption Factor
AB	Assembly Bill
ACGIH	American Conference of Governmental Industrial Hygienists
ACH	Air Changes per Hour
ACS	American Chemical Society
AL	(State of) Alabama
ANSI	American National Standards Institute
aq	Aqueous (solution)
AR	(State of) Arkansas
aREL	Acute Reference Exposure Level
ASHRAE	American Society of Heating, Refrigeration, & Air Conditioning Engineers
ASTM	American Society for Testing and Materials
---- E1333	American Large Chamber Test
---- D5582	American Desiccator Test
---- D6007	American Small Chamber Test
AT	Averaging time
ATCM	Airborne Toxic Control Measure(s)
AUF	Ammonia-urea-formaldehyde (resin)
BACT	Best Available Control Technology
BASE	(USEPA's) Building Assessment Survey and Evaluation (Study)
°C	(degrees) Celsius
CA	(State of) California
C _{air}	Concentration in air
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CC	Composite Core
CCOHS	Canadian Centre for Occupational Health and Safety
CDNHW	Canada Department of National Health and Welfare
CH ₃ OH	Methanol
CIIT	Chemical Industry Institute of Toxicology
C _{ind}	Indoor (formaldehyde) concentration
C _{inv} ²	In-vehicle (formaldehyde) concentration
cm ²	square centimeter

CNSL	Cashew Nut Shell Liquid
Co.	Company
CO ₂	Carbon Dioxide
Corp.	Corporation
C _{out}	Outdoor (formaldehyde) concentration
CPA	Composite Panel Association
cREL	Chronic Reference Exposure Level
CWIC	California Wood Industries Coalition
CY	Calendar Year
DBR	Daily Breathing Rate
DIBt	Deutsches Institut für Bautechnik
DIN 68763	
DIN EN 120	European Perforator Test
DNA	Deoxyribonucleic Acid
DNPH	Dinitrophenylhydrazine
Dose _{inh}	Inhalation dose
DSM	
E1	E-one (standard) (European Composite Wood Standard)
ed(s)	Editor(s)
ED	Exposure duration
EF	Emission Factor or Exposure Frequency
EN	European Norm
EN 120	European Desiccator Test
EN 300	
EN 314	
EN 717-1	European chamber method
EN 717-2	European gas analysis method
F☆☆	F-two star (Japanese Building Material Standard)
F☆☆☆	F-three star (Japanese Building Material Standard)
F☆☆☆☆	F-four star (Japanese Building Material Standard)
°F	(degrees) Fahrenheit
FCI	Formaldehyde Council, Inc.
FR	France
FSOR	Final Statement of Reasons
ft ²	square feet
ft ² /ft ³	square feet per cubic foot
F:M	Formaldehyde to melamine (mole ratio)
F:U	Formaldehyde to urea (mole ratio)
g	Gram(s)
GA	(State of) Georgia
g/m ²	grams per square meter
g/m ³	grams per cubic meter

GM	Geometric Mean
HAP	Hazardous Air Pollutant(s)
HC(s)	Hydrocarbon(s)
HCHO	Formaldehyde
Hg	Mercury
H ₂ O	Water
HPVA	Hardwood Plywood & Veneer Association
hr	hour
HRA	Health Risk Assessment
HRT	Heartland Resource Technologies
HSC	(State of California) Health and Safety Code
HSDB	Hazardous Substances Databank
HUD	(U.S. Department of) Housing and Urban Development
HWPW	Hardwood Plywood
IAQ	Indoor Air Quality
IARC	International Agency for Research on Cancer
IB	Internal Bond (cf. ANSI A208.1-1999)
ID	(State of) Idaho
Inc.	Incorporated
IP(s)	Industrial Particleboard(s)
IPCS	International Programme on Chemical Safety
ISC3	(USEPA's) Industrial Source Complex Short Term (Model)
ISOR	Initial Statement of Reasons
JAS	Japan Agricultural Standards
JIS	Japan Industrial Standards
kg	Kilogram(s)
kg/cm ²	kilograms per square centimeter
kg/m ³	Kilograms per cubic meter
kJ/mol	Kilojoules per mole
L	Liter
LA	(State of) Louisiana
lbs	pounds
lbs/ft ³	pounds per cubic foot
LLC	Limited Liability Corporation
Ltd.	Limited
m	meter(s)
m ²	square meter(s)
m ³	cubic meter(s)
mm	Millimeter
Mac	Melamine acetate

MACT	Maximum Achievable Control Technology
MD	(State of) Maryland
MDF	Medium Density Fiberboard
MDI	Methylene Diisocyanate
ME	(State of) Maine
MF	Melamine-formaldehyde (resin)
mg	milligram(s)
mg/L	milligrams per liter
mg/m ³	Milligrams per cubic meter
MHI	Manufactured Housing Institute
MI	(State of) Michigan
min	minute
mL	Milliliter
MLIT	(Japanese) Ministry of Land, Infrastructure, and Transport
mm Hg	Millimeters of mercury
MOE	Modulus of Elasticity (cf. ANSI A208.1-1999)
MOR	Modulus of Rupture (cf. ANSI A208.1-1999)
MPa	Megapascal(s)
MPa-s	Megapascal-second(s)
MR	Moisture-resistant
MS	(State of) Mississippi
MT	(State of) Montana
MUF	Melamine-urea-formaldehyde (resin)
NAICS	North American Industry Classification System
NC	(State of) North Carolina
NCI	National Cancer Institute
ND	Not Dated
ng	Nanogram(s)
NH& MRC	(Australia's) National Health & Medical Research Council
NH ₃	Ammonia
NHEXAS	National Human Exposure Assessment Survey
nm	Nanometer(s)
No.	Number
NR	Not Reported
Nu	Nucleophile
NY	(State of) New York
OECD	Organization for Economic Cooperation and Development
OEHHA	Office of Environmental Health Hazard Assessment
OEL	Occupational Exposure Limit
OH	Hydroxyl (radical, ion)
OK	(State of) Oklahoma
OR	(State of) Oregon
OSB	Oriented Strand Board
OSHA	(U.S. Dept. of Labor's) Occupational Safety & Health Administration

p.	page
P1	Phase 1
P2	Phase 2
PA	(State of) Pennsylvania
PAA	Plywood Association of Australasia, Ltd.
PAE	Polyamidoamine-Epichlorohydrin
PB	Particleboard (Hodgson et al., 2002)
PEL	Permissible Exposure Limit
PF	Phenol-formaldehyde (resin)
PF-MDI	Phenol-formaldehyde + methylene diisocyanate (hybrid resin)
pH	Power of Hydrogen
pMDI	Polydiphenylmethane Diisocyanate (resin)
PMUF-MDI	Phenol-melamine-urea-formaldehyde + methylene diisocyanate (hybrid resin)
pp.	pages
ppb	parts per billion
ppm	parts per million
PRF	Phenol-resorcinol-formaldehyde (resin)
psi	pounds per square inch
PUF	Phenol-urea-formaldehyde (resin)
PUF-MDI	Phenol-urea-formaldehyde + methylene diisocyanate (hybrid resin)
PUFT	Phenol-urea-formaldehyde + tannin (resin)
PVA	Polyvinyl Acetate
RC	Room Chamber (Brown, 1999 – Volume = 33.6 m ³)
REL	Reference Exposure Level
RF	Resorcinol-formaldehyde (resin)
RH	Relative Humidity
RNA	Ribonucleic Acid
RWP	Reconstituted Wood-based Panels
SC	Small Chamber or (State of) South Carolina
SD	Standard Deviation or (State of) South Dakota
sec	second(s)
SIC	Standard Industrial Classification
SIDS	Screening Information Data Set
s/mm	seconds per millimeter
soln	(aqueous) solution
SPI	Soy Protein Isolate
SRP	Scientific Review Panel (on Toxic Air Contaminants)
STEL	Short-term Exposure Limit
SWPW	Softwood Plywood
TAC	Toxic Air Contaminant(s)
T _{ind}	Time spent indoors

T _{inv}	Time spent in-vehicles
tMDF	Thin medium density fiberboard
TN	Tris(hydroxymethyl)nitromethane
T _{out}	Time spent outdoors
TVOC	Total VOC (concentration)
TWA	Time-weighted Average
TX	(State of) Texas
UCB	University of California, Berkeley
UF	Urea-formaldehyde (resin)
UFFI	Urea-formaldehyde Foam Insulation
UF-MDI	Urea-formaldehyde + methylene diisocyanate (hybrid resin)
UNEP	United Nations Environment Programme
URE	Unit Risk Estimate
URF	Unit Risk Factor
U.S.	United States of America
USB	United Soybean Board
USDA	U.S. Department of Agriculture
USDHHS	U.S. Department of Health and Human Services
USDOE	U.S. Department of Energy (Hodgson et al., 2002)
USEPA	U.S. Environmental Protection Agency
UT	(State of) Utah
VA	(State of) Virginia
VC	Veneer Core
VOC	Volatile Organic Compound(s)
WA	(State of) Washington
WHO	World Health Organization
WKI	Wilhelm Klauwitz Institute
WI	(State of) Wisconsin
WSAD	Water-soaking-and-drying (test)
µg/hr	micrograms per hour
µg/m ³	micrograms per cubic meter
µg/m ² /hr	microgram(s) per square meter per hour