

# Commonly Used UCUM Codes for Healthcare Units

## Document Instructions

This document contains a list of UCUM codes for commonly used units in clinical lab value reporting. The tables below display the valid UCUM code, descriptive name, non-UCUM common synonym, and an IUPAC dimension for the unit. Units are grouped by general type. You may browse the list, use the links to the left to jump to a specific unit type, or use the search box to the left to search for a particular unit.

## Additional Resources

To save a copy of these tables to your computer, right click on the desired link and choose "Save Target As..." or "Save Link As..."

[Commonly Used UCUM Codes \(XML Format\)](#)

[Commonly Used UCUM Codes \(TSV Format\)](#)

[How To Download UCUM Codes from CDC PHIN VADS](#)

## Unit Types

### Most Common Healthcare Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%	Percent	%	1
/uL	PerMicroLiter	/uL	L-3
[iU]/L	InternationalUnitsPerLiter	IU/L	L-3[arb]
10 <sup>3</sup> /uL	ThousandsPerMicroLiter	K/uL, x10 <sup>3</sup> /mm <sup>3</sup>	L-3
10 <sup>6</sup> /uL	MillionsPerMicroLiter	M/uL, x10 <sup>6</sup> /mm <sup>3</sup>	L-3
fL	FemtoLiter	fL	L-3
g/dL	GramsPerDeciLiter	g/dL	L-3M
g/L	GramsPerLiter	g/L	L-3M
g/mL	GramsPerMilliLiter	g/mL	L-3M
kPa	KiloPascal	kPa	L-1MT-2
m[iU]/mL	MilliInternationalUnitsPerMilliLiter	mIU/mL	L-3[arb]
meq/L	MilliEquivalentsPerLiter	mEq/L	L-3N
mg/dL	MilliGramsPerDeciLiter	mg/dL	L-3M
mm[Hg]	MilliMetersOfMercury	mm Hg	L-1MT-2
mmol/kg	MilliMolesPerKiloGram	mmol/kg	M-1N
mmol/L	MilliMolesPerLiter	mmol/L	L-3N
mosm/kg	MilliOsmolesPerKiloGram	mOsm/kg	M-1N
ng/mL	NanoGramsPerMilliLiter	ng/mL	L-3M
nmol/L	NanoMolesPerLiter	nmol/L	L-3N

pg	PicoGrams	pg	M
pg/mL	PicoGramsPerMilliLiter	pg/mL	L-3M
pmol/L	PicoMolesPerLiter	pmol/L	L-3N
U/L	UnitsPerLiter	U/L	L-3[arb]
u[iU]/mL	MicroInternationalUnitsPerMilliLiter	uIU/mL	L-3[arb]
ug/dL	MicroGramsPerDeciLiter	ug/dL	L-3M
ug/L	MicroGramsPerLiter	ug/L	L-3M
ug/mL	MicroGramsPerMilliLiter	ug/mL	L-3M
umol/L	MicroMolesPerLiter	umol/L	L-3N

## Unity

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[lg]	Log10	log 10	1
10*6/{Specimen}	MillionPerSpecimen	x10^6/spec	1
/ {tot}	PerTotalCount	/Total	1
10*3	Thousand	x10^3	1
10*3.{RBC}	ThousandRedBloodCells	x10^3 RBCs	1
10*5	OneHundredThousand	x10^5	1
10*6	Million	x10^6	1
10*8	TenToEighth	x10^8	1

## General Fraction Unit

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%	Percent	%	1
{Relative}%	RelativePercent	Relative %	1
%{Total}	PercentTotal	% of Total	1
%{0to3Hours}	Percent0to3Hours	% 0-3 h	1

## Number Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/10*10	PerTenGiga	/10^10	1
/10*6	PerMillion	/10^6	1
/10*9	PerBillion	/10^9	1
/10*12	PerTrillion	/10^12	1
%{Normal}	PercentNormal	% Normal	1
%{SpermMotility}	PercentSpermMotility	% Sperm Motility	1
%{Positive}	PercentPositive	% Positive	1
%{FetalErythrocytes}	PercentFetalErythrocytes	% Fetal RBC	1
%{OfLymphocytes}	PercentOfLymphocytes	% Lymphs	1

%{ofBacteria}	PercentofBacteria	% Bacteria	1
%{OfWBCs}	PercentOfWBCs	% WBCs	1
%{Abnormal}	PercentAbnormal	% Abnormal	1
%{EosSeen}	PercentEosinophilsSeen	% EOS Seen	1
%{Hemolysis}	PercentHemolysis	% Hemolysis	1
%{Blockade}	PercentBlockade	% Blockade	1
%/100{WBC}	PercentPer100WBC	% per 100 WBC	1

## Mass Or Substance Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%{Binding}	PercentBinding	% Binding	1
%{TotalProtein}	PercentTotalProtein	% Total Protein	1
%{Bound}	PercentBound	% Bound	1
%{Hemoglobin}	PercentHemoglobin	% Hgb	1
%{HemoglobinSaturation}	PercentHemoglobinSaturation	% Hgb SAT	1
%{Carboxyhemoglobin}	PercentCarboxyhemoglobin	% CO Hgb	1
%{HemoglobinA1C}	PercentHemoglobinA1C	% Hgb A1C	1

## Mass Or Substance Rate Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%{Excretion}	PercentExcretion	% Excretion	1
%{Uptake}	PercentUptake	% Uptake	1

## Mass Ratio Or Mass Fraction Or Mass Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
ug/ng	MicroGramsPerNanoGram	ug/ng	1
ng/mg	NanoGramsPerMilliGram	ng/mg	1
ng/mg{Protein}	NanoGramsPerMilliGramProtein	ng/mg Prot	1
ug/mg	MicroGramsPerMilliGram	ug/mg	1
ug/mg{Cre}	MicroGramsPerMilliGramCreatinine	ug/mg Cre	1
mg/mg	MilliGramsPerMilliGram	mg/mg	1
mg/mg{Cre}	MilligramsPerMilligramCreatinine	mg/mg Cre	
ng/g	NanoGramsPerGram	ng/g	1
ng/g{Cre}	NanoGramsPerGramCreatinine	ng/g Cre	1
ug/g	MicroGramsPerGram	ug/g	1
ug/[100]g	MicroGramPer100Gram	ug/100 g	1
ug/g{DryWeight}	MicroGramPerGramDryWeight	ug/g Dry Weight	1
ug/g{Cre}	MicroGramPerGramCreatinine	ug/g Cre	1
ug/g{Hgb}	MicroGramsPerGramHemoglobin	ug/g Hgb	1

mg/g	MilliGramsPerGram	mg/g	1
mg/g{Cre}	MilliGramPerGramCreatinine	mg/g Cre	1
g/g	GramsPerGram	g/g	1
ng/kg	NanoGramsPerKiloGram	ng/kg	1
ug/kg	MicroGramsPerKiloGram	ug/kg	1
mg/kg	MilliGramsPerKiloGram	mg/kg	1
g/kg	GramsPerKiloGram	g/kg	1
g/[100]g	GramsPer100Gram	g/100g	1
g/g{Cre}	GramsPerGramCreatinine	g/g Cre	1

## Substance Ratio Or Substance Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
pmol/umol	PicoMolesPerMicroMole	pmol/umol	1
nmol/mmol	NanoMolesPerMilliMole	nmol/mmol	1
nmol/mmol{Cre}	NanoMolesPerMilliMoleCreatinine	nmol/mmol Cre	1
nmol/mol	NanoMolesPerMole	nmol/mol	1
umol/mol	MicroMolesPerMole	umol/mol	1
mmol/mol	MilliMolesPerMole	mmol/mol	1
mmol/mol{Cre}	MilliMolesPerMoleCreatinine	mmol/mol Cre	1
umol/mol{Cre}	MicroMolesPerMoleCreatinine	umol/mol Cre	1
eq/umol	EquivalentsPerMicroMole	eq/umol	1
eq/mmol	EquivalentsPerMilliMole	eq/mmol	1
{BoneCollagen}eq/mmol{Cre}	BoneCollagenEquivalentsPerMilliMoleCreatinine	BCE/mmol Cre	1
{BoneCollagen}eq/umol{Cre}	BoneCollagenEquivalentsPerMicroMoleCreatinine	BCE/umol Cre	1

## Volume Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%{vol}	VolumePercent	Volume %	1
%{Oxygen}	PercentOxygen	% Oxygen	1
mL/dL	MilliLitersPerDeciLiter	cc/dL	1

## Catalytic Fraction Or Arbitrary Fraction Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
%{NormalPooledPlasma}	PercentNormalPooledPlasma	% Normal Pooled Plasma	1

%{Activity}	PercentActivity	% Activity	1
%{BasalActivity}	PercentBasalActivity	% Basal Activity	1
%{Inhibition}	PercentInhibition	% Inhibition	1

## Entitic Number Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/Entity	PerEntity	/Entity	1
/100{WBC}	Per100WBC	/100 WBCs	1
/100	Per100	/100	1
/100{Spermatozoa}	Per100Spermatozoa	/100 Sperm	1
/10*12{rbc}	PerTrillionRedBloodCells	/10^12 RBCs	1

## Plane Angle Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
deg	DegreesOfArc	Deg	1

## Arbitrary Number Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/[arb`U]	PerArbitraryUnit	/Arbitrary Unit	[arb]-1

## Arbitrary Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
u[iU]	MicroInternationalUnit	uIU	[arb]
[iU]	InternationalUnit	IU	[arb]
10*6.[iU]	MillionInternationalUnit	10^6 IU	[arb]

## English Length Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[in_i]	Inch	in	L
[ft_i]	Feet	ft	L
[yd_i]	Yard	yd	L
[fth_i]	Fathom	fathom	L
[mi_i]	StatuteMile	mi	L
[nmi_i]	NauticalMile	n mile	L
[Ch]	French	French Unit	L

## SI Length Units

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Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
fm	FemtoMeter	fm	L
pm	PicoMeter	pm	L
nm	NanoMeter	nm	L
um	MicroMeter	um	L
mm	MilliMeter	mm	L
cm	CentiMeter	cm	L
dm	DeciMeter	dm	L
m	Meter	m	L
km	KiloMeter	km	L

## English Mass Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[gr]	Grain	gr	M
[oz_av]	Ounce	oz	M
[oz_tr]	TroyOunce	tr oz	M
[lb_av]	Pound	lb	M
[ston_av]	Ton	Ton	M
[dr_av]	Dram	dr	M

## SI Mass Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
fg	FemtoGram	fg	M
pg	PicoGram	pg	M
ng	NanoGram	ng	M
ug	MicroGram	ug	M
ug/{TotalVolume}	MicroGramsPerTotalVolume	ug/Total Volume	M
ug/{Specimen}	MicroGramsPerSpecimen	ug/Spec	M
mg	MilliGram	mg	M
mg/{Volume}	MilliGramsPerVolume	mg/Volume	M
mg/{TotalVolume}	MilliGramPerTotalVolume	mg/Total Volume	M
g	Gram	g	M
g/{TotalWeight}	GramsPerTotalWeight	g/Total Weight	M
dg	DeciGram	dg	M
cg	CentiGram	cg	M
kg	KiloGram	kg	M
t	MetricTon	Metric Ton	M

## Lineic Mass Units

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Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
pg/mm	PicoGramsPerMilliMeter	pg/mm	L-1M

## Temperature Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
K	DegreesKelvin	K	q
Cel	DegreesCelsius	C	q
[degF]	DegreesFahrenheit	F	q

## Thermal Resistance Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
K/W	KelvinPerWatt	K/Watt	L-2M-1T3q

## Time Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
ps	PicoSecond	ps	T
ns	NanoSecond	ns	T
us	MicroSecond	us	T
ms	MilliSecond	ms	T
s	Second	sec	T
ks	KiloSecond	ks	T
Ms	Megasecond	Ms	T
min	Minute	min	T
h	Hour	h	T
d	Day	d	T
wk	Week	wk	T
mo	Month	Mo	T
a	Year	yr	T

## Substance Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
eq	Equivalent	eq	N
ueq	MicroEquivalent	ueq	N
meq	MilliEquivalent	meq	N
meq/{Specimen}	MilliEquivalentsPerSpecimen	meq/Spec	N
mol	Mole	mol	N
mmol	MilliMole	mmol	N
mmol/{TotalVolume}	MilliMolesPerTotalVolume	mmol/Total Volume	N

fmol	Femtomole	fmol	N
pmol	PicoMole	pmol	N
umol	MicroMole	umol	N
nmol	NanoMole	nmol	N
mosm	MilliOsmole	mosm	N

## Areic Substance Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
meq/m2	MilliEquivalentsPerSquareMeter	meg/m^2	L-2N
mmol/m2	MilliMolesPerSquareMeter	mmol/m^2	L-2N

## English Area Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[sin_i]	SquareInch	in^2	L2
[sft_i]	SquareFeet	ft^2	L2
[syd_i]	SquareYard	yd^2	L2

## SI Area Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
mm2	SquareMilliMeter	mm^2	L2
cm2	SquareCentiMeter	cm^2	L2
m2	SquareMeter	m^2	L2

## English Volume Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[foz_us]	FluidOunce	fl oz	L3
[cin_i]	CubicInch	in^3	L3
[cup_us]	Cup	Cup	L3
[pt_us]	Pint	pt	L3
[qt_us]	Quart	qt	L3
[gal_us]	Gallon	gal	L3
[fdr_us]	FluidDram	fl dr	L3

## SI Volume Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
fL	FemtoLiter	fL	L3
pL	PicoLiter	pL	L3



nL	NanoLiter	nL	L3
uL	MicroLiter	uL	L3
mL	MilliLiter	mL	L3
mL/{h`b}	MilliLitersPerHeartbeat	mL/heart beat	L3
L	Liter	L	L3
dL	DeciLiter	dL	L3
cL	CentiLiter	cL	L3
kL	KiloLiter	kL	L3
hL	HectoLiter	hL	L3

## Volume Duration Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
L.s2/s	LiterSquareSecondPerSecond	L s^2/s	L3T

## Number Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/mg	PerMilliGram	mg	M-1
/g	PerGram	/g	M-1
/g{creat}	PerGramCreatinine	/g Cre	M-1
/g{HGB}	PerGramHemoglobin	/g Hgb	M-1
/g{tot`nit}	PerGramTotalNitrogen	/g Total Nitrogen	M-1
/g{tot`prot}	PerGramTotalProtein	/g Total Protein	M-1
/g{wet`tis}	PerGramWetTissue	/g Wet Tissue	M-1
/kg	PerKiloGram	/kg	M-1
/kg{body`wt}	PerKiloGramBodyWeight	/kg Body Weight	M-1

## Substance Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
fmol/mg	FemtoMolesPerMilliGram	fmol/mg	M-1N
nmol/mg	NanoMolesPerMilliGram	nmol/mg	M-1N
umol/mg	MicroMolesPerMilliGram	umol/mg	M-1N
umol/mg{Cre}	MicroMolesPerMilliGramCreatinine	umol/mg Cre	M-1N
mol/kg	MolesPerKiloGram	mol/kg	M-1N
fmol/g	FemtoMolesPerGram	fmol/gm	M-1N
nmol/g	NanoMolesPerGram	nmol/g	M-1N
nmol/g{Cre}	NanoMolesPerGramCreatinine	nmol/g Cre	M-1N
umol/g	MicroMolesPerGram	umol/g	M-1N
umol/g{Cre}	MicroMolesPerGramCreatinine	umol/g Cre	M-1N
umol/g{Hgb}	MicroMolesPerGramHemoglobin	umol/g Hgb	M-1N

mmol/g	MilliMolesPerGram	mmol/g	M-1N
mmol/kg	MilliMolesPerKiloGram	mmol/kg	M-1N
osm/kg	OsmolesPerKiloGram	Osm/kg	M-1N

## Substance Rate Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
mosm/kg	MilliOsmolesPerKiloGram	mosm/kg	M-1T-1N
meq/g	MilliEquivalentsPerGram	meq/g	M-1N
meq/g{Cre}	MilliEquivalentsPerGramCreatinine	meq/g Cre	M-1N
meq/kg	MilliEquivalentsPerKiloGram	meq/kg	M-1N

## Arbitrary Concentration Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[iU]/g	InternationalUnitsPerGram	IU/g	M-1[arb]
[iU]/g{Hgb}	InternationalUnitsPerGramHemoglobin	IU/g Hgb	M-1[arb]
{Ehrlich_U}/100g	EhrlichUnitsPer100Gram	EU/100 g	M-1[arb]
[iU]/kg	InternationalUnitsPerKilogram	IU/kg	M-1[arb]
umol/min/g	MicroMolesPerMinutePerGram	umol/min/g	M-1T-1N
mU/g	MilliUnitsPerGram	mU/g	M-1T-1N
mU/g{Hgb}	MilliUnitsPerGramHemoglobin	mU/g Hgb	M-1T-1N
U/g	UnitsPerGram	U/g	M-1T-1N
U/g{Hgb}	UnitsPerGramHemoglobin	U/g Hgb	M-1T-1N
U/g{Cre}	UnitsPerGramCreatinine	U/g Cre	M-1T-1N
mU/mg{Cre}	MilliUnitsPerMilliGramCreatinine	mU/mg Cre	M-1T-1N
mU/mg	MilliUnitsPerMilligram	mU/mg	M-1T-1N
kU/g	KiloUnitsPerGram	kU/g	M-1T-1N
kat/kg	KatalPerKilogram	kat/kg	M-1T-1N

## Volume Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
mL/kg	MilliLitersPerKiloGram	mL/kg	L3M-1
L/kg	LitersPerKilogram	L/kg	L3M-1

## Energy Content Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
kCal/[oz_av]	KiloCaloriesPerOunce	kCal/oz	L2T-2

## Areic Number Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/m2	PerSquareMeter	/m^2	L-2

### Areic Mass Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
g/m2	GramsPerSquareMeter	g/m^2	L-2M
kg/m2	KiloGramsPerSquareMeter	kg/m^2	L-2M
ug/m2	MicroGramsPerSquareMeter	ug/m^2	L-2M
mg/m2	MilliGramsPerSquareMeter	mg/m^2	L-2M
ng/m2	NanoGramsPerSquareMeter	ng/m^2	L-2M

### Massive Distance Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
g.m	GramMeter	Gram Meter	LM
g.m/{hb}	GramMeterPerHeartbeat	Gram Meter/Heartbeat	LM
g.m/({hb}.m2)	GramMeterPerHeartbeatPerSquareMeter	Gram Meter/Heartbeat/m^2	L-1M

### Molar Mass Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
kg/mol	KiloGramsPerMole	kg/mol	MN-1

### Number Concentration Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
/uL	PerMicroLiter	/mm^3	L-3
{Cells}/uL	CellsPerMicroLiter	cells/uL	L-3
{rbc}/uL	RedBloodCellsPerMicroLiter	RBC/mm^3	L-3
10*3/uL	ThousandsPerMicroLiter	10^3/uL	L-3
10*6/uL	MillionsPerMicroLiter	10^6/uL	L-3
10*9/uL	BillionsPerMicroLiter	10^9/uL	L-3
/mL	PerMilliLiter	/mL	L-3
{Spermatozoa}/mL	SpermatozoaPerMilliLiter	Sperm/mL	L-3
{Copies}/mL	CopiesPerMilliLiter	Copies/mL	L-3
10*3/mL	ThousandPerMilliLiter	10^3/mL	L-3
10*3{Copies}/mL	ThousandCopiesPerMilliLiter	10^3 copies/mL	L-3
10*6/mL	MillionPerMilliLiter	10^6/mL	L-3
10*9/mL	BillionsPerMilliliter	10^9/mL	L-3
{cfu}/mL	ColonyFormingUnitsPerMilliLiter	cfu/mL	L-3
/dL	PerDeciLiter	/dL	L-3

/L	PerLiter	/L	L-3
10*3/L	ThousandPerLiter	10^3/L	L-3
10*6/L	MillionPerLiter	10^6/L	L-3
10*12/L	TrillionPerLiter	10^12/L	L-3
10*9/L	BillionPerLiter	10^9/L	L-3

## Mass Concentration Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
pg/mL	PicoGramsPerMilliLiter	pg/mL	L-3M
ng/mL	NanoGramsPerMilliLiter	ng/mL	L-3M
ng/mL{rbc}	NanoGramsPerMilliLiterRedBloodCells	ng/mL RBCs	L-3M
ug/mL	MicroGramsPerMilliLiter	ug/mL	L-3M
mg/mL	MilliGramsPerMilliLiter	mg/mL	L-3M
g/mL	GramsPerMilliLiter	g/mL	L-3M
pg/dL	PicoGramsPerDeciLiter	pg/dL	L-3M
ng/dL	NanoGramsPerDeciLiter	ng/dL	L-3M
ug/dL	MicroGramsPerDeciLiter	ug/dL	L-3M
ug/dL{rbc}	MicroGramsPerDeciLiterRedBloodCells	ug/dL RBCs	L-3M
mg/dL	MilliGramsPerDeciLiter	mg/dL	L-3M
mg{Phenylketones}/dL	MilliGramsPhenylketonesPerDeciLiter	mg Phe/dL	L-3M
g/dL	GramsPerDeciLiter	g/dL	L-3M
ng/L	NanoGramsPerLiter	ng/L	L-3M
pg/L	PicoGramsPerLiter	pg/L	L-3M
ug/L	MicroGramsPerLiter	ug/L	L-3M
mg/L	MilliGramsPerLiter	mg/L	L-3M
g/L	GramsPerLiter	g/L	L-3M
kg/L	KiloGramsPerLiter	kg/L	L-3M
mg/m3	MilliGramsPerCubicMeter	mg/m^3	L-3M
kg/m3	KiloGramsPerCubicMeter	kg/m^3	L-3M

## Substance Concentration Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
fmol/mL	FemtoMolesPerMilliLiter	fmol/mL	L-3N
pmol/mL	PicoMolesPerMilliLiter	pmol/mL	L-3N
nmol/mL	NanoMolesPerMilliLiter	nmol/mL	L-3N
umol/mL	MicroMolesPerMilliLiter	umol/mL	L-3N
mol/mL	MolesPerMilliLiter	mol/mL	L-3N
pmol/dL	PicoMolesPerDeciLiter	pmol/dL	L-3N
nmol/dL	NanoMolesPerDeciLiter	nmol/dL	L-3N
umol/dL	MicroMolesPerDeciLiter	umol/dL	L-3N

mmol/dL	MilliMolesPerDeciLiter	mmol/dL	L-3N
mmol/L	MilliMolesPerLiter	mmol/L	L-3N
pmol/L	PicoMolesPerLiter	pmol/L	L-3N
nmol/L	NanoMolesPerLiter	nmol/L	L-3N
umol/L	MicroMolesPerLiter	umol/L	L-3N
mol/L	MolesPerLiter	mol/L	L-3N
mol/m3	MolesPerCubicMeter	mol/m^3	L-3N
ueq/mL	MicroEquivalentsPerMilliLiter	ueq/mL	L-3N
meq/mL	MilliEquivalentPerMilliLiter	meq/mL	L-3N
eq/mL	EquivalentsPerMilliLiter	eq/mL	L-3N
{AHG}eq/mL	AHGEquivalentsPerMilliLiter	AHG eq/mL	L-3N
10*6.eq/mL	MillionEquivalentsPerMilliLiter	10^6 eq/mL	L-3N
ueq/L	MicroEquivalentsPerLiter	ueg/L	L-3N
meq/L	MilliEquivalentsPerLiter	meg/L	L-3N
eq/L	EquivalentsPerLiter	eg/L	L-3N
meq/dL	MilliEquivalentsPerDeciLiter	meg/dL	L-3N
mosm/L	MilliOsmolesPerLiter	mOsm/L	L-3N
osm/L	OsmolesPerLiter	Osm/L	L-3N

## Arbitrary Concentration Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
u[iU]/mL	MicroInternationalUnitsPerMilliLiter	uIU/mL	L-3[arb]
m[iU]/mL	MilliInternationalUnitsPerMilliLiter	mIU/mL	L-3[arb]
{IgGPhospholipid}U/mL	IgGPhospholipidUnitsPerMilliLiter	IgG Phospholipid U/mL	L-3[arb]
{IgMPhospholipid}U/mL	IgMPhospholipidUnitsPerMilliLiter	IgM Phospholipid U/mL	L-3[arb]
{ComplementCh50}U/mL	ComplementCh50UnitsPerMilliLiter	CH50 U/mL	L-3[arb]
{IgAPhospholipid}U/mL	IgAPhospholipidUnitsPerMilliLiter	IgA Phospholipid U/mL	L-3[arb]
{Elisa_U}/mL	ElisaUnitsPerMilliLiter	Elisa U/mL	L-3[arb]
[iU]/mL	InternationalUnitsPerMilliLiter	IU/mL	L-3[arb]
k[iU]/mL	KiloInternationalUnitsPerMilliLiter	kIU/mL	L-3[arb]
[iU]/dL	InternationalUnitsPerDeciLiter	IU/dL	L-3[arb]
{Ehrlich_U}/dL	EhrlichUnitsPerDeciLiter	EU/dL	L-3[arb]
m[iU]/L	MilliInternationalUnitsPerLiter	mIU/L	L-3[arb]
[iU]/L	InternationalUnitsPerLiter	IU/L	L-3[arb]

## pH Units

Valid UCUM Code	Descriptive Name	Common Synonym (non-UCUM)	Dimension (IUPAC)
[pH]	pH	pH	[pH]