
# GS1 US Data Hub
# Developer Portal API Data Dictionary

**February 23rd, 2023**

# Table of Contents

## API Data Schema

| Field Name | Description | API | Action | Data Type | Format |
|---|---|---|---|---|---|
| ProductDescription | Describes the product | Product | Get | Text/String | 200 characters |
| sku | Internal product identifier of yourstock keeping unit here. | Product | Get | Text/String | 3-75 characters |
| BrandName | Indicates the name of the product line used with consumers | Product | Get | Text/String | 3-70 characters |
| IsVariable | T/F Check for whether the productis variable measure | Product | Get | Text/String | 5-9 characters |
| IsPurchasable | T/F Check for whether the productis purchasable | Product | Get | Text/String | 5-9 characters |
| height | Height of product including packaging | Product | Get | Numeric | 1-8 characters |
| width | Width of product including packaging | Product | Get | Numeric | 1-8 characters |
| depth | Depth of product including packaging | Product | Get | Numeric | 1-8 characters |
| dimensionMeasure | Unit of measure used for dimensions | Product | Get | Text/String | 1-2 characters |
| grossWeight | Weight of the product plus its container or packaging | Product | Get | Numeric | 1-8 characters |
| netWeight | Weight of the product itself | Product | Get | Numeric | 1-8 characters |
| weightMeasure | Unit of measure used for weight | Product | Get | Text/String | 2-3 characters |
| TargetMarket | Designated market of sale for the product | Product | Get | Text/String | |
| Status | Life cycle state of product | Product | Get | Text/String | 5-9 characters |
| ModifiedDate | Date of last modification to productrecord | Product | Get | | |
| SubBrandName | Alternate Brand Name | Product | Get | Text/String | 1-2 characters |
| ProductDescriptionShort | Short product description | Product | Get | Text/String | 1-2 characters |
| NetContent1Count | Product Content amount (primary) | Product | Get | Text/String | 1-2 characters |
| NetContent1UnitOfMeasure | Product Content Unit of Measure (primary) | Product | Get | Text/String | 1-2 characters |
| NetContent2Count | Product Content amount (2nd) | Product | Get | Text/String | 1-2 characters |
| NetContent2UnitOfMeasure | Product Content Unit of Measure (2nd) | Product | Get | Text/String | 1-2 characters |
| NetContent3Count | Product Content amount (3rd) | Product | Get | Text/String | 1-2 characters |
| NetContent3UnitOfMeasure | Product Content Unit of Measure (3rd) | Product | Get | Text/String | 1-2 characters |
| GlobalProductClassification | Global Product Classification Code | Product | Get | Text/String | |
| ImageURL | The web address for any product images | Product | Get | Text/String | 1-2 characters |

## API Data Schema

| Field Name | Description | API | Action | Data Type | Format |
|---|---|---|---|---|---|
| GTINStatus | The combination of the status set by the Brand Owner and the status of the underlying license | Product | Get | Text/String | 1-2 characters |
| BrandNameLanguage1 | Language for Brand Name1 | Product | Get | Text/String | 3-70 characters |
| ProductDescriptionLanguage1 | Language for Product Description1 | Product | Get | Text/String | 3-70 characters |
| BrandName2 | Indicates the name of the product line used with consumers (secondary market) | Product | Get | Text/String | 3-70 characters |
| BrandNameLanguage2 | Language for Brand Name2 | Product | Get | Text/String | 3-70 characters |
| ProductDescription2 | Describes the product (in 2nd Language) | Product | Get | Text/String | 3-200 characters |
| ProductDescriptionLanguage2 | Language for Product Description1 | Product | Get | Text/String | 3-200 characters |
| companyName | Name of Company associated with product | Product | Get | Text/String | 1-255 characters |
| CompanyURI | Unique Resource Identity | Product | Get | Text/String | 1-8000 characters |
| Prefix | Company Prefix | Product | Get | Text/String | 3-200 characters |
| gtin | This is the 14-digit representation of the Global Trade Item Number as it would be stored in a database | Product | Get | Numeric | 14 characters |
| gtin13 | 13-digit number used predominately outside of North America for EAN barcodes | Product | Get | Numeric | 13 characters |
| gtin12 | The 12-digit Global Trade Item Number as it would be used with a UPC-A barcode | Product | Get | Numeric | 12 characters |
| gtin8 | The 8-digit Global Trade Item Number used predominately outside of North America for smaller products | Product | Get | Numeric | 8 characters |
| PackagingLevel | Product position in Packaging Heirarchy | Product | Get | Text/String | 12 characters |
| Industry | The primary industry where the product is sold | Product | Get | Text/String | 3-20 characters |
| entityGLN | GLN used to identify a company's legal entity | Product | Get | Numeric | 13 characters |
| ChildGTINs | Child GTINs for upper level package product | Product | Get | Text/String | 1-2 characters |
| Quantity | Quantity of child GTINs for upper level package product | Product | Get | Text/String | 1-2 characters |
| LabelDescription | Product label description | Product | Get | Text/String | 1-2 characters |
| Ancestors | Product(s) above the queried product inhierarchy | Product | Get | Text/String | 12 Characters |
| Descendants | Product(s) below the queried product inhierarchy | Product | Get | Text/String | 12 Characters |

## API Data Schema

| Field Name | Description | API | Action | Data Type | Format |
|---|---|---|---|---|---|
| status | T/F Is the location active | Location | Get | Boolean | 1 bit |
| prefix | GS1 Company Prefix | Location | Get | Numeric | 8 characters |
| gln | Global Location Number | Location | Get | Numeric | 13 characters |
| parentGLN | Parent Global Location Number | Location | Get | Numeric | 13 characters |
| locationName | Name of Location | Location | Get | Text/String | 1-80 characters |
| locationName2 | Secondary location name | Location | Get | Text/String | 0-80 characters |
| bypassAddressVerification | | Location | Get | Boolean | 1 bit |
| replacesGLN | Optional field that indicates the prior GLN for a location | Location | Get | Text/String | 13 characters |
| addressLine1 | Primary street address | Location | Get | Text/String | 1-80 characters |
| addressLine2 | Any secondary information such as Suite, Floor, etc. | Location | Get | Text/String | 0-80 characters |
| addressLine3 | Additional descriptive information that is not verified through the USPS data base. | Location | Get | Text/String | 0-80 characters |
| city | City | Location | Get | Text/String | 1-35 characters |
| stateProvince | State or Province | Location | Get | Text/String | 2 characters |
| zip | Zip Code | Location | Get | Numeric | 10 characters |
| country | Country | Location | Get | Text/String | 1-50 characters |
| phone | Company Phone Number | Location | Get | Text/String | 1-20 characters |
| locationTypes | Varies by Industry | Location | Get | Text/String | 7-48 characters |
| glnType: code | Description of the location type | Location | Get | Text/String | LEGAL_ENTITY, FUNCTION, FIXED_PHYSICAL_LOCATION, MOBILE_PHYSICAL_LOCATION, DIGITAL_LOCATION |
| glnType: name | Name associated with each location type for the GLN | Location | Get | Text/String | Legal Entity, Function, Fixed Physical Location, Mobile Physical Location, Digital |

## API Data Schema

| Field Name | Description | API | Action | Data Type | Format |
|---|---|---|---|---|---|
| industry | Industry (Based off of Parent GLN) | Location | Get | Text/String | General, Consumer Packaged Goods, Healthcare, Foodservice, General Merchandise, Fresh Food and Upstream, Apparel |
| supplyChainRole | Varies by Industry | Location | Get | Text/String | See Appendix D |
| organizationType | Describes the purpose of the organization associated with this GLN | Location | Get | Text/String | See Appendix E |
| collaborativeIdType | A previously assigned party or location identifier that can be associated to a GLN to add business value | Location | Get | Text/String | See Appendix F |
| collaborativeIdValue | Identification number associated with the Collaborative ID type | Location | Get | Text/String | |
| latitude | Latitude of the location | Location | Get | Numeric | |
| longitude | Longitude of the location | Location | Get | Numeric | |
| digitalLocationUrl | URL of Digital Location | Location | Get | Text/String | 0-2083 characters |
| organizationTerminationDate | Date organization terminated/closed/dissolved | Location | Get | Date/Time | YYY-DD-MMM |
| organizationFormationDate | Date location was formed | Location | Get | Date/Time | YYY-DD-MMM |
| geoshapeType | Describes the shape of the geoshape | Location | Get | Text/String | "Box", "Circle", "Line", "Polygon" |
| geoshapeCoordinates | Latitude/Longitude pairs making up the geoshape | Location | Get | Text/String | |
| organizationType | Description of the purpose of the organization associated with the GLN | Location | Get | Text/String | |
| createDate | Date and time the location record was created | Location | Get | Date/Time | YYYY-DD-MMTHH:MM:SS.SSS |
| reValidationDate | Date and time the location record was revalidated | Location | Get | Date/Time | YYYY-DD-MMTHH:MM:SS.SSS |
| conditionalAttributes: attributeName | Class of Trade level | Location | Get | Text/String | See Appendix G |
| conditionalAttributes: attributeValue | Class of Trade code | Location | Get | Text/String | See Appendix G |
| GPO | Group Purchasing Organization the location belongs to | Location | Get | Text/String | 0-80 characters |

## API Data Schema

| Field Name | Description | API | Action | Data Type | Format |
|---|---|---|---|---|---|
| selfManaged | T/F is this a company who manages their location records | Location | Get | Boolean | 1 bit |
| Source | Data source of results | Company | Get | Text/String | 1-18 characters |
| CompanyName | Company Name | Company | Get | Text/String | 1-80 characters |
| StreetAddress1 | Company Address 1 | Company | Get | Text/String | 1-80 characters |
| StreetAddress2 | Company Address 2 | Company | Get | Text/String | 0-80 characters |
| StreetAddress3 | Company Address 3 | Company | Get | Text/String | 0-80 characters |
| City | City | Company | Get | Text/String | 1-80 characters |
| StateProvince | State or Province | Company | Get | Text/String | 2 characters |
| ZipCode | Zip Code | Company | Get | Numeric | 10 characters |
| Country | Country | Company | Get | Text/String | 1-50 characters |
| Phone | Company Phone Number | Company | Get | Text/String | 1-20 characters |
| EntityGLN | GLN used to identify a company'slegal entity | Company | Get | Numeric | 13 characters |
| ModifiedDate | Date of the last change in company status or the addition of a prefix | Company | Get | Date/Time | MM/DD/YYYY HH:MM:SS xM |
| GSRN | Global Service Relation Number | Company | Get | Numeric | 18 characters |
| UPCPrefix | Identification number used in the creation of UPC barcodes | Company | Get | Numeric | 6-10 characters |
| GS1Prefix | Unique number that identifies a company as the manufacturer throughout the entire product supply-chain | Company | Get | Numeric | 7-11 characters |
| PrefixStatus | Prefix Status | Company | Get | Text/String | Active/Inactive |

## Appendix A: Accepted Country Codes

| Alpha_2_Code | English_Short_Name |
|---|---|
| AD | ANDORRA |
| AE | UNITED ARAB EMIRATES |
| AF | AFGHANISTAN |
| AG | ANTIGUA AND BARBUDA |
| AI | ANGUILLA |
| AL | ALBANIA |
| AM | ARMENIA |
| AN | NETHERLANDS ANTILLES |
| AO | ANGOLA |
| AQ | ANTARCTICA |
| AR | ARGENTINA |
| AS | AMERICAN SAMOA |
| AT | AUSTRIA |
| AU | AUSTRALIA |
| AW | ARUBA |
| AX | ÅLAND ISLANDS |
| AZ | AZERBAIJAN |
| BA | BOSNIA AND HERZEGOWINA |
| BB | BARBADOS |
| BD | BANGLADESH |
| BE | BELGIUM |
| BF | BURKINA FASO |
| BG | BULGARIA |
| BH | BAHRAIN |
| BI | BURUNDI |
| BJ | BENIN |
| BL | SAINT BARTHÉLEMY |
| BM | BERMUDA |
| BN | BRUNEI DARUSSALAM |
| BO | BOLIVIA |
| BQ | BONAIRE, SINT EUSTATIUS AND SABA |
| BR | BRAZIL |
| BS | BAHAMAS |
| BT | BHUTAN |
| BV | BOUVET ISLAND |
| BW | BOTSWANA |

| Alpha_2_Code | English_Short_Name |
|---|---|
| BY | BELARUS |
| BZ | BELIZE |
| CA | CANADA |
| CC | COCOS |
| CD | CONGO, THE DEMOCRATIC REPUBLIC OF THE |
| CF | CENTRAL AFRICAN REPUBLIC |
| CG | CONGO |
| CH | SWITZERLAND |
| CI | COTE D'IVOIRE |
| CK | COOK ISLANDS |
| CL | CHILE |
| CM | CAMEROON |
| CN | CHINA |
| CO | COLOMBIA |
| CR | COSTA RICA |
| CU | CUBA |
| CV | CAPE VERDE |
| CW | CURAÇAO |
| CX | CHRISTMAS ISLAND |
| CY | CYPRUS |
| CZ | CZECH REPUBLIC |
| DE | GERMANY |
| DJ | DJIBOUTI |
| DK | DENMARK |
| DM | DOMINICA |
| DO | DOMINICAN REPUBLIC |
| DZ | ALGERIA |
| EC | ECUADOR |
| EE | ESTONIA |
| EG | EGYPT |
| EH | WESTERN SAHARA |
| ER | ERITREA |
| ES | SPAIN |
| ET | ETHIOPIA |
| FI | FINLAND |
| FJ | FIJI |

## Appendix A: Accepted Country Codes

| Alpha_2_Code | English_Short_Name |
|---|---|
| FK | FALKLAND ISLANDS |
| FM | MICRONESIA, FEDERATED STATES OF |
| FO | FAROE ISLANDS |
| FR | FRANCE |
| FX | FRANCE, METROPOLITAN |
| GA | GABON |
| GB | UNITED KINGDOM |
| GD | GRENADA |
| GE | GEORGIA |
| GF | FRENCH GUIANA |
| GG | GUERNSEY |
| GH | GHANA |
| GI | GIBRALTAR |
| GL | GREENLAND |
| GM | GAMBIA |
| GN | GUINEA |
| GP | GUADELOUPE |
| GQ | EQUATORIAL GUINEA |
| GR | GREECE |
| GS | SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS |
| GT | GUATEMALA |
| GU | GUAM |
| GW | GUINEA-BISSAU |
| GY | GUYANA |
| HK | HONG KONG |
| HM | HEARD AND MC DONALD ISLANDS |
| HN | HONDURAS |
| HR | CROATIA |
| HT | HAITI |
| HU | HUNGARY |
| ID | INDONESIA |
| IE | IRELAND |
| IL | ISRAEL |
| IM | ISLE OF MAN |
| IN | INDIA |

| Alpha_2_Code | English_Short_Name |
|---|---|
| IO | BRITISH INDIAN OCEAN TERRITORY |
| IQ | IRAQ |
| IR | IRAN |
| IS | ICELAND |
| IT | ITALY |
| JE | JERSEY |
| JM | JAMAICA |
| JO | JORDAN |
| JP | JAPAN |
| KE | KENYA |
| KG | KYRGYZSTAN |
| KH | CAMBODIA |
| KI | KIRIBATI |
| KM | COMOROS |
| KN | SAINT KITTS AND NEVIS |
| KP | KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF |
| KR | KOREA, REPUBLIC OF |
| KW | KUWAIT |
| KY | CAYMAN ISLANDS |
| KZ | KAZAKHSTAN |
| LA | LAO PEOPLE'S DEMOCRATIC REPUBLIC |
| LB | LEBANON |
| LC | SAINT LUCIA |
| LI | LIECHTENSTEIN |
| LK | SRI LANKA |
| LR | LIBERIA |
| LS | LESOTHO |
| LT | LITHUANIA |
| LU | LUXEMBOURG |
| LV | LATVIA |
| LY | LIBYAN ARAB JAMAHIRIYA |
| MA | MOROCCO |
| MC | MONACO |
| MD | MOLDOVA, REPUBLIC OF |
| ME | MONTENEGRO |

## Appendix A: Accepted Country Codes

| Alpha_2_Code | English_Short_Name |
|---|---|
| MF | SAINT MARTIN (FRENCH PART) |
| MG | MADAGASCAR |
| MH | MARSHALL ISLANDS |
| MK | MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF |
| ML | MALI |
| MM | MYANMAR |
| MN | MONGOLIA |
| MO | MACAU |
| MP | NORTHERN MARIANA ISLANDS |
| MQ | MARTINIQUE |
| MR | MAURITANIA |
| MS | MONTSERRAT |
| MT | MALTA |
| MU | MAURITIUS |
| MV | MALDIVES |
| MW | MALAWI |
| MX | MEXICO |
| MY | MALAYSIA |
| MZ | MOZAMBIQUE |
| NA | NAMIBIA |
| NC | NEW CALEDONIA |
| NE | NIGER |
| NF | NORFOLK ISLAND |
| NG | NIGERIA |
| NI | NICARAGUA |
| NL | NETHERLANDS |
| NO | NORWAY |
| NP | NEPAL |
| NR | NAURU |
| NU | NIUE |
| NZ | NEW ZEALAND |
| OM | OMAN |
| PA | PANAMA |
| PE | PERU |
| PF | FRENCH POLYNESIA |

| Alpha_2_Code | English_Short_Name |
|---|---|
| PG | PAPUA NEW GUINEA |
| PH | PHILIPPINES |
| PK | PAKISTAN |
| PL | POLAND |
| PM | ST. PIERRE AND MIQUELON |
| PN | PITCAIRN |
| PR | PUERTO RICO |
| PS | PALESTINE, STATE OF |
| PT | PORTUGAL |
| PW | PALAU |
| PY | PARAGUAY |
| QA | QATAR |
| RE | REUNION |
| RO | ROMANIA |
| RS | SERBIA |
| RU | RUSSIA |
| RW | RWANDA |
| SA | SAUDI ARABIA |
| SB | SOLOMON ISLANDS |
| SC | SEYCHELLES |
| SD | SUDAN |
| SE | SWEDEN |
| SG | SINGAPORE |
| SH | ST. HELENA |
| SI | SLOVENIA |
| SJ | SVALBARD AND JAN MAYEN ISLANDS |
| SK | SLOVAKIA |
| SL | SIERRA LEONE |
| SM | SAN MARINO |
| SN | SENEGAL |
| SO | SOMALIA |
| SR | SURINAME |
| SS | SOUTH SUDAN |
| ST | SAO TOME AND PRINCIPE |
| SV | EL SALVADOR |
| SX | SINT MAARTEN (DUTCH PART) |

## Appendix A: Accepted Country Codes

| Alpha_2_Code | English_Short_Name |
|---|---|
| SY | SYRIAN ARAB REPUBLIC |
| SZ | SWAZILAND |
| TC | TURKS AND CAICOS ISLANDS |
| TD | CHAD |
| TF | FRENCH SOUTHERN TERRITORIES |
| TG | TOGO |
| TH | THAILAND |
| TJ | TAJIKISTAN |
| TK | TOKELAU |
| TL | TIMOR-LESTE |
| TM | TURKMENISTAN |
| TN | TUNISIA |
| TO | TONGA |
| TP | EAST TIMOR |
| TR | TURKEY |
| TT | TRINIDAD AND TOBAGO |
| TV | TUVALU |
| TW | TAIWAN |
| TZ | TANZANIA, UNITED REPUBLIC OF |
| UA | UKRAINE |
| UG | UGANDA |
| UM | UNITED STATES MINOR OUTLYING ISLANDS |
| US | UNITED STATES |
| UY | URUGUAY |
| UZ | UZBEKISTAN |
| VA | VATICAN CITY STATE |
| VC | SAINT VINCENT AND THE GRENADINES |
| VE | VENEZUELA |
| VG | VIRGIN ISLANDS |
| VI | VIRGIN ISLANDS (U.S.) |
| VN | VIET NAM |
| VU | VANUATU |
| WF | WALLIS AND FUTUNA ISLANDS |
| WS | SAMOA |
| YE | YEMEN |
| YT | MAYOTTE |
| ZA | SOUTH AFRICA |
| ZM | ZAMBIA |
| ZW | ZIMBABWE |

## Appendix B: Accepted Language Codes

| English Name of Language | ISO 639-1 Code |
|---|---|
| Abkhazian | ab |
| Afar | aa |
| Afrikaans | af |
| Akan | ak |
| Albanian | sq |
| Amharic | am |
| Arabic | ar |
| Aragonese | an |
| Armenian | hy |
| Assamese | as |
| Avaric | av |
| Avestan | ae |
| Aymara | ay |
| Azerbaijani | az |
| Bambara | bm |
| Bashkir | ba |
| Basque | eu |
| Belarusian | be |
| Bengali | bn |
| Bihari languages | bh |
| Bislama | bi |
| Bokmål, Norwegian; Norwegian Bokmål | nb |
| Bosnian | bs |
| Breton | br |
| Bulgarian | bg |
| Burmese | my |
| Catalan; Valencian | ca |
| Central Khmer | km |
| Chamorro | ch |
| Chechen | ce |
| Chichewa; Chewa; Nyanja | ny |
| Chinese | zh |
| Church Slavic; Old Slavonic; Church Slavonic; Old Bulgarian; Old Church Slavonic | cu |
| Chuvash | cv |
| Cornish | kw |

| English Name of Language | ISO 639-1 Code |
|---|---|
| Corsican | co |
| Cree | cr |
| Croatian | hr |
| Czech | cs |
| Danish | da |
| Divehi; Dhivehi; Maldivian | dv |
| Dutch; Flemish | nl |
| Dzongkha | dz |
| English | en |
| Esperanto | eo |
| Estonian | et |
| Ewe | ee |
| Faroese | fo |
| Fijian | fj |
| Finnish | fi |
| Fulah | ff |
| Gaelic; Scottish Gaelic | gd |
| Galician | gl |
| Ganda | lg |
| Georgian | ka |
| German | de |
| Greek, Modern (1453-) | el |
| Guarani | gn |
| Gujarati | gu |
| Haitian; Haitian Creole | ht |
| Hausa | ha |
| Hebrew | he |
| Herero | hz |
| Hindi | hi |
| Hiri Motu | ho |
| Hungarian | hu |
| Icelandic | is |
| Ido | io |
| Igbo | ig |
| Indonesian | id |

## Appendix B: Accepted Language Codes

| English Name of Language | ISO 639-1 Code |
|---|---|
| Interlingua (International Auxiliary Language Association) | ia |
| Interlingue; Occidental | ie |
| Inuktitut | iu |
| Inupiaq | ik |
| Irish | ga |
| Italian | it |
| Japanese | ja |
| Javanese | jv |
| Kalaallisut; Greenlandic | kl |
| Kannada | kn |
| Kanuri | kr |
| Kashmiri | ks |
| Kazakh | kk |
| Kikuyu; Gikuyu | ki |
| Kinyarwanda | rw |
| Kirghiz; Kyrgyz | ky |
| Komi | kv |
| Kongo | kg |
| Korean | ko |
| Kuanyama; Kwanyama | kj |
| Kurdish | ku |
| Lao | lo |
| Latin | la |
| Latvian | lv |
| Limburgan; Limburger; Limburgish | li |
| Lingala | ln |
| Lithuanian | lt |
| Luba-Katanga | lu |
| Luxembourgish; Letzeburgesch | lb |
| Macedonian | mk |
| Malagasy | mg |
| Malay | ms |
| Malayalam | ml |
| Maltese | mt |
| Manx | gv |

| English Name of Language | ISO 639-1 Code |
|---|---|
| Maori | mi |
| Marathi | mr |
| Marshallese | mh |
| Mongolian | mn |
| Nauru | na |
| Navajo; Navaho | nv |
| Ndebele, North; North Ndebele | nd |
| Ndebele, South; South Ndebele | nr |
| Ndonga | ng |
| Nepali | ne |
| Northern Sami | se |
| Norwegian | no |
| Norwegian Nynorsk; Nynorsk, Norwegian | nn |
| Occitan (post 1500) | oc |
| Ojibwa | oj |
| Oriya | or |
| Oromo | om |
| Ossetian; Ossetic | os |
| Pali | pi |
| Panjabi; Punjabi | pa |
| Persian | fa |
| Polish | pl |
| Portuguese | pt |
| Pushto; Pashto | ps |
| Quechua | qu |
| Romanian; Moldavian; Moldovan | ro |
| Romansh | rm |
| Rundi | rn |
| Russian | ru |
| Samoan | sm |
| Sango | sg |
| Sanskrit | sa |
| Sardinian | sc |
| Serbian | sr |
| Shona | sn |
| Sichuan Yi; Nuosu | ii |

## Appendix B: Accepted Language Codes

| English Name of Language | ISO 639-1 Code |
|---|---|
| Sichuan Yi; Nuosu | ii |
| Sindhi | sd |
| Sinhala; Sinhalese | si |
| Slovak | sk |
| Slovenian | sl |
| Somali | so |
| Sotho, Southern | st |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

**Instructions:** UOM names are listed alphabetically by name. Locate the UOM name and then enter the code in the NetContent1UnitOfMeasure, NetContent2UnitofMeasure, and/orNetContent3UnitofMeasure columns.

| Name | Code | Definition |
|---|---|---|
| $10^6$ (1000000) bits (binarydigits) per second | E20 | A unit of information equal to $10^6$ (1000000) bits (binary digits) per second. |
| Ampere | AMP | Ampere |
| Ampere Hour | AMH | A unit of electric charge defining the amount of charge accumulated by asteady flow of one ampere for one hour. |
| Angstrom | A11 | A unit of length equal to one hundred-millionth of a centimetre, 10–10 metre, used mainly to express wavelengths and interatomic distances. |
| Anti XA Unit | AXU | A unit of measure for blood potency. Units for the anti XA activity whichis a measure to the anti coagulating effect at low molecular heparins. |
| Assortment | AS | A unit of count defining the number of assortments (assortment: set of items grouped in a mixed collection). |
| Atomic MassUnits (AMU) | D43 | Atomic Mass Units |
| Bar (unit ofpressure) | BAR | The bar is widely used in descriptions of pressure; 1 bar = 100 kilopascals 0.987 atmospheres. |
| Barrel US | BLL | There are varying standards for barrel for some specific commodities, including 31 gal for beer, 40 gal for whiskey or kerosene, and 42 gal for petroleum. The general standard for liquids is 31.5 gal or half a hogshead; the general standard for dry contents is 7,056 Cubic Inches. |
| Base box | BB | A unit of area of 112 sheets of tin mil products (tin plate, tin free steel or black plate) 14 by 20 inches, or 31,360 square inches. |
| Batch | 5B | A unit of count defining the number of batches (batch: quantity of material produced in one operation or number of animals or persons coming at once). |
| Beats Per Minute | BPM | Beats Per Minute |
| Becquerel | BQL | The becquerel (symbol Bq) is the SI derived unit of radioactivity. One Bqis defined as the activity of a quantity of radioactive material in which one nucleus decays per second. SI uses the becquerel rather than the second for the unit of activity measure to avoid dangerous mistakes: a measurement in becquerels is proportional to activity, and thus a more dangerous source of radiation gives a higher reading. A measurement inseconds is inversely proportional. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Bit per second | B10 | In telecommunications and computing, bitrate (sometimes written bit rate, data rate or as a variable R or fb) is the number of bits that are conveyed or processed per unit of time. The bit rate is quantified using the bits per second (bit/s or bps) unit. |
| Board Foot | BFT | A specialized unit of measure for the volume of rough lumber (before drying and planing with no adjustments) or planed/surfaced lumber. It is the volume of a one-foot length of a board one foot wide and one inch thick. Some countries utilize the synonym super foot or superficial foot. |
| Book | D63 | A unit of count defining the number of books (book: set of items bound together or written document of a material whole). |
| British thermalunit | BTU | The British thermal unit (BTU or Btu) is a traditional unit of energy. It is approximately the amount of energy needed to heat one pound of water one degree Fahrenheit. One Btu is equal to about 1.06 kilojoules. It is used in the power, steam generation, heating and air conditioning industries. |
| Bushel (UK) | BUI | A bushel is an imperial and U.S. customary unit of dry volume, equivalent in each of these systems to 4 pecks or 8 gallons. It is usedfor volumes of dry commodities (not liquids), most often in agriculture |
| Bushel (US) | BUA | A bushel is an imperial and U.S. customary unit of dry volume, equivalent in each of these systems to 4 pecks or 8 gallons. It is usedfor volumes of dry commodities (not liquids), most often in agriculture |
| Byte | AD | A unit of information equal to 8 bits. |
| Calorie - InternationalTable (IT) | D70 | A calorie is 1/100 of the amount of energy required to warm one gram of air-free water from 0 °C to 100 °C at standard atmospheric pressure;this is about 4.190 J. Its use is archaic, having been replaced by the SI unit of energy, the joule. However, in many countries it remains in common use as a unit of food energy. In the context of nutrition, and especially food labelling, the calorie is approximately equal to 4.1868 joules (J), and energy values are normally quoted in kilojoules (kJ) and kilocalories (kcal). This code is being deprecated. Use code E14 Kilocalorie to express food calories. |
| Candela per Square Metre | A24 | Candela per Square Metre |
| Card | CG | A unit of count defining the number of units of card (card: thick stiffpaper or cardboard). |
| Centigram | CGM | A centigram is one hundredth (1/100) of a gram |
| Centilitre | CLT | A centilitre is one hundredth (1/100) of a litre |
| Centimetre | CMT | A centimetre is equal to one hundredth of a metre. |
| Centimetre PerHour | H49 | The number of centimetre per hour the trade item or part of the trade item moves. |
| Centimetre PerSecond | 2M | The number of centimetre per second the trade item or part of the trade item moves. |
| Centisimal Hahnemannian Dilution (CH) | X_CHD | A count of attenuation steps or dilution levels representing the homeopathic potency of a substance using the Hahnemannian (CH) method of attenuation; commonly denoted as CH1, CH2, CH3, etc. Each centesimal attenuation step represents one part source material combined with 99 parts dilution medium; commonly denoted as C1, C2, C3, etc. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Cold Cramp Amp | X_CCA | A measurement of the number of amps a battery can deliver at 0 ° F for 30 seconds and not drop below 7.2 volts. |
| Colony FormingUnits | CFU | Colony Forming Units: is a rough estimate of the number of viablebacteria or fungal cells in a sample. |
| Colony FormingUnits per gram(CFU/g) | X_CFG | Colony Forming Units per gram (CFU/g). See CFU for definition ofColony Forming Unit |
| Colony FormingUnits per Pound(CFU/lb) | X_CFP | Colony Forming Units per Pound (CFU/lb) See CFU for definition ofColony Forming Unit |
| Conventionalmillimetre of mercury | HN | Conventional millimetre of mercury mm Hg. |
| Count | 1N | Count |
| Cubic centimetre | CMQ | A cubic centimetre is the volume of a cube of side length one centimetre (0.01 m) equal to a millilitre. |
| Cubic decimetre | DMQ | A cubic decimetre is the volume of a cube of side length one decimetre (0.1 m) |
| Cubic foot | FTQ | A cubic foot is the volume of a cube of side length one foot (0.3048 m) . |
| Cubic Foot PerMinute | 2L | Cubic foot per minute |
| Cubic inch | INQ | A cubic inch is the volume of a cube of side length one inch (0.254 m). |
| Cubic metre | MTQ | A cubic metre is the volume of a cube of side length one metre. |
| Cubic Metre PerHour | MQH | Cubic Metre Per Hour |
| Cubic millimetre | MMQ | A cubic millimetre is the volume of a cube of side length one milliimetre (0.001 m) |
| Cup (US) | G21 | Cup (US) |
| Days | DAY | A day is one three hundreds and sixty fifth (1/365) of a year |
| DeadweightTonnage | A43 | A unit of mass defining the difference between the weight of a ship when completely empty and its weight when completely loaded, expressed as the number of tons. |
| Decibar | X_DBA | Decibar |
| Decibel | 2N | A measurement for sound in air and other gases, relative to 20 micropascals (μPa) = 2 × 10−5 Pa, the quietest sound a human can hear. This is roughly the sound of a mosquito flying 3 metres away. Thisis often abbreviated to just "dB"; however the correct abbreviation is dB(SPL), indicating decibel for Sound Pressure Level. |
| Decigram | DG | A decigram is one tenth (1/10) of a gram. |
| Decilitre | DLT | A decilitre is one tenth (1/10) of a litre. |
| Decimetre | DMT | A decimetre is equal to one tenth of a metre. |
| Degree (Unit of Angel) | DD | A measurement of plane angle, representing 1⁄360 of a full rotation; one degree is equivalent to π/180 radians. |
| Degree Celsius | CEL | Celsius (also historically known as centigrade) is a temperature scale,the freezing point of water is 0 degrees Celsius (°C) and the boiling point 100 °C (at standard atmospheric pressure), placing the boiling and freezing points of water exactly 100 degrees apart. |
| Degree Fahrenheit | FAH | The Fahrenheit temperature scale, the freezing point of water is 32 degrees Fahrenheit (°F) and the boiling point 212 °F (at standard atmospheric pressure), placing the boiling and freezing points of water exactly 180 degrees apart. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Dose | E27 | A unit of count defining the number of doses (dose: a definite quantityof a medicine or drug). |
| Dots per inch | E39 | A unit of count defining the number of dots per linear inch as a measureof the resolution or sharpness of a graphic image. |
| Dozen | DZN | A unit of count defining the number of units in multiples of 12. |
| Dram (UK) | DRI | The dram (archaic spelling drachm) was historically both a coin and a weight. Currently it is both a small mass in the Apothecaries' system of weights and a small unit of volume. This unit is called more correctly fluid dram or in contraction also fluidram. The fluid dram is defined as 1⁄8 of a fluid ounce, which means it is exactly equal to 3.551 632 812 500 0 mL in the Commonwealth and Ireland. In England dram came to mean a small draught of cordial or alcohol; hence the term dram-house for the taverns where one could purchase a dram. |
| Dram (US) | DRA | The dram (archaic spelling drachm) was historically both a coin and a weight. Currently it is both a small mass in the Apothecaries' system of weights and a small unit of volume. This unit is called more correctly fluid dram or in contraction also fluidram. The term also refers to the fluid dram, a measure of capacity equal 1⁄8 of a fluid ounce, which means it is exactly equal to 3.696 691 195 312 5 mL in the United States. |
| Dry Pint (US) | PTD | The United States dry pint is equal one eighth of a US dry gallon or one half US dry quarts. It is used in the United States but is not as commonas the liquid pint. |
| Each | EA | A unit of count defining the number of items regarded as separate units. |
| ELISA Units | ELU | Enzyme-linked immunosorbent assay unit, is always associated with a product and a method. |
| Femtolitre | Q32 | Femtolitre- Femtolitre is the metric unit of volume equal to one thousand trillionth (European) or one quadrillionth (American) litre. One femtolitre is the same as one cubic micrometre (µm3), which can be represented numerically as 0.00000000000001/liter. |
| Femtometre | A71 | Femtometre- a quadrillionth of a metre (10 to the negative 15th power) |
| Fluid ounce (UK) | OZI | A fluid ounce (UK) is equal to one thirtieth (1/30) of a UK pint or 28.4130625 millilitres. |
| Fluid ounce (US) | OZA | A fluid ounce (US) is equal to one sixteenth (1/16) of a US pint or 29.5735295625 millilitres . |
| Foot | FOT | The international foot is defined to be equal to 0.3048 meters. |
| Foot Per Hour | K14 | The number of foot per hour the trade item or part of the trade item moves. |
| Foot Per Minute | FR | The number of foot per minute the trade item or part of the trade item moves. |
| Foot Per Second | FS | The number of foot per second the trade item or part of the trade item moves. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| French gauge | H79 | The French scale (most correctly abbreviated as Fr, but also often abbreviated as FR or F) is commonly used to measure the catheter size (Circumference is in millimeters), in which 1 Fr = 0.33 mm in diameter.In the French Gauge system as it is also known, the diameter in millimeters of the catheter can be determined by dividing the French size by 3, thus an increasing French size corresponds with a larger diameter catheter. The following equations summarize the relationships:D(mm) = Fr/3 or Fr = D(mm)*3 |
| Gallon (UK) | GLI | The imperial (UK) gallon was legally defined as 4.54609 litres. |
| Gallon (US liquid)Per Second | K30 | Gallon (US liquid) per second |
| Gallon (US) | GLL | The U.S. liquid gallon is legally defined as 231 cubic inches, and is equalto exactly 3.785411784 litres or about 0.133680555 cubic feet. |
| Gauge | AWG | Gauge- A number referring to the outer diameter of hypodermic or suture needles. Smaller gauge numbers indicate larger outer diameters. Inner diameter depends on both gauge and wall thickness. An increasing needle-gauge size corresponds to a smaller diameter needle.This is contrary to French Gauge where an increasing gauge size corresponds to a larger external diameter. |
| Gigabecquerel | GBQ | A unit of activity equal to 109 becquerels. |
| Gigabyte | E34 | A unit of information equal to 109 bytes. |
| Gigahertz | A86 | A unit of frenquecy equal to 109 Hertz |
| Gigawatt hour | GWH | A gigaawatt hour is 109 kilowat hour or 3.6 terajoules. |
| Grain | GRN | A grain or troy grain is precisely 64.79891 milligrams. Exactly 7,000grains per avoirdupois pound. |
| Gram | GRM | A gram is defined as one one-thousandth of the kilogram (1×10-3 kg). |
| Gram of FissileIsotope | GFI | A unit of mass defining the number of grams of a fissile isotope (fissile isotope: an isotope whose nucleus is able to be split when irradiated with low energy neutrons). |
| Gram Per Hour | F27 | Gram Per Hour |
| Gram Per Litre | GL | Gram Per Litre:A unit of measurement of mass concentration that shows how many grams of a certain substance are present in one litre. |
| Gram per squaremetre | GM | In the metric system, the density of all types of paper, paperboard, and fabric, is expressed in terms of grams per square meter (g/m2).This quantity is commonly called grammage both in English and French (ISO 536), though many English- speaking countries still refer to the "weight". The term density here is used somewhat incorrectly, as density is mass by volume. More precisely, it is a measure of the area density, areal density, or surface density. |
| Grams Per CubicCentimetre | 23 | Grams Per Cubic Centimetre |
| Gross | GRO | A unit of count defining the number of units in multiples of 144 (12 x12). |
| Gross kilogram | E4 | A unit of mass defining the total number of kilograms before deductions. |
| Half dozen | HD | A unit of count defining the number of units in multiplt of six (6). |
| Heat TransferCoefficient | D55 | Heat Transfer Coefficient |
| Hectogram | HGM | A hectogram is one hundred (100) grams |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Hectolitre | HLT | A hectolitre is one hundred (100) litres. |
| Hertz | HTZ | A unit of frequency defined as the number of complete cycles per second; it is the basic unit of frequency in the International System of Units (SI). |
| Histamine Equivalent Prick | HEP | Histamine equivalent prick testing for allergen. |
| Horsepower | K43 | Horsepower (electric) - Automotive horsepower is defined as "a unit of power equal to 550 foot-pounds per second (745.7 watts)". |
| Hour | HUR | An hour is a unit of measurement of time of the duration of 60 minutes, or 3600 seconds. It is 1/24 of a median Earth day. |
| Hundred boardfoot | BP | A unit of volume equal to one hundred board foot. |
| Hundred count | HC | A unit of count defining the number of units counted in multiples of 100. |
| Hundred pound(cwt) / hundredweight (US) | CWA | A unit of weight in the U.S. Customary System equal to 100 pounds(45.36 kilograms); also called cental. |
| Hundred weight(UK) | CWI | A unit of weight in the British Imperial System equal to 112 pounds(50.80 kilograms); also called quintal. |
| Hundredths of anInch | X_HIN | One Hundredth of an inch or 0.01. (Usage- Measurements of Papers,Films, Circuit boards and the like) |
| Inch of Mercury | F79 | Inch of mercury conversion of 3,386 39 × $10^3$ kg x $m^{-1}$ x $s^{-2}$ OR 3386.389 pascals. |
| Inch of Mercury(32 ºF) | N16 | Non SI-conforming unit of pressure according to the Anglo-American and Imperial system for units, whereas the value of 1 inHg meets the static pressure, which is generated by a mercury at a temperature of 32°F with a height of 1 inch.3,386 38 x $10^3$ Pa OR 3386.38 pascals. |
| Inch of Mercury(60 ºF) | N17 | Non SI-conforming unit of pressure according to the Anglo-American and Imperial system for units, whereas the value of 1 inHg meets the static pressure, which is generated by a mercury at a temperature of 60°F with a height of 1 inch.3,376 85 x $10^3$ Pa OR 3376.85 pascals. |
| Inch Per Minute | M63 | The number of inch per minute the trade item or part of the trade item moves. |
| Inch Per Second | IU | The number of inch per second the trade item or part of the trade item moves. |
| Inches | INH | An international inch is defined to be equal to 25.4 millimeters. |
| International Units per Kilogram (IU/kg) | X_IUK | International Units per Kilogram (IU/kg) a unit of activity or potency for vitamins, hormones, or other substances, defined individually for each substance in terms of the activity of a standard quantity or preparation. |
| Joule | JOU | A joule is the energy exerted by a force of one newton acting to movean object through a distance of one metre. |
| Kallikrein inactivator unit. | KIU | Kallikrein Inactivator Unit per Milliliter definition: An arbitrary unit of a kallikrein inactivator concentration equal to the concentration at which one milliliter of the mixture contains one unit of the kallikrein inactivator |
| Kelvin | KEL | Kelvin: a unit of absolute temperature equal to 1/273.16 of the absolute temperature of the triple point of water. One kelvin degree is equal to one Celsius degree. |
| Kilo Becquerel | 2Q | kBq is 103 Bq |
| Kilobyte | 2P | A unit of information equal to 103 (1000) bytes. |
| Kilocalorie (international table) | E14 | A unit of energy equal to 1000 calories. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Kilogram | KGM | A unit of mass equal to one thousand grams. |
| Kilogram drainednet weight | KDW | Kilogram drained net weight |
| Kilogram Force | B37 | The gravitational force of a kilogram weight or a one-kilogram mass multiplied by the acceleration of standard Earth gravity, equal to 9.8 newtons. |
| Kilogram ofhydrogen peroxide | KHY | Kilogram of hydrogen peroxide |
| Kilogram of methylamine | KMA | Kilogram of methylamine |
| Kilogram ofnitrogen | KNI | Kilogram of nitrogen |
| Kilogram ofphosphorus pentoxide (phosphoric anhydride) | KPP | Kilogram of phosphorus pentoxide (phosphoric anhydride) |
| Kilogram of potassium hydroxide (caustic potash) | KPH | Kilogram of potassium hydroxide (caustic potash) |
| Kilogram of potassium oxide | KPO | Kilogram of potassium oxide |
| Kilogram of sodium hydroxide (caustic soda) | KSH | Kilogram of sodium hydroxide (caustic soda) |
| Kilogram of substance 90% dry | KSD | Kilogram of substance 90% dry |
| Kilogram ofUranium | KUR | A unit of mass equal to one thousand grams of uranium. |
| Kilogram persquare centimetre | D5 | A kilogram-force per square centimeter (kgf/cm2), often just kilogram per square centimeter (kg/cm2), or kilopond per square centimeter is a unit of pressure using metric units. Its use is now deprecated; it is not a part of the International System of Units (SI), the modern metric system. The unit is similar to the English unit psi (lbf/in2). |
| Kilogram persquare metre | 28 | A unit of pressure equal to 9.80665*10-05 Bar |
| Kilohertz | KHZ | A unit of frenquecy equal to 1000 Hertz |
| Kilojoule | KJO | A kilojoule is 1000 joules |
| Kilolitre | K6 | A kilolitre is one thousand (1000) litres. |
| Kilometre | KMT | A kilometre is one thousand (1000) metres |
| Kilometre PerHour | KMH | The number of kilometre per hour the trade item or part of the trade item moves. |
| Kilometre PerSecond | M62 | The number of kilometre per second the trade item or part of the trade item moves. |
| Kilonewton | B47 | 1000 Newtons or amount needed to accelerate 1 kilogram of mass at the rate of 1 metre per second squared multiplied by 1000 (Used to measure force of an object where the value exceeds 1000 newtons). |
| Kilonewton PerSquare Metre | KNM | Kilonewton Per Square Metre |
| Kilopascal | KPA | Kilopascal- a thousand pascals (10 to the 3rd power) |
| Kilowatt | KWT | A kilowatt is one thousand (1000) watts |
| Kilowatt / hour | D03 | A unit of accumulated energy of a thousand watts over a period of one hour. |
| Kilowatt hour | KWH | A kilowatt hour is a unit of energy equal to 3.6 megajoules.It is also a common commercial unit of electric energy representing the amount of energy delivered at a rate of 1,000 watts over a period of one hour. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Kit | KT | A unit of count defining the number of kits (kit: tub, barrel or pail). |
| Knot | KNT | The number of knots the trade item or part of the trade item moves. A Knot is a unit of speed equal to one nautical mile (1.852 km) per hour, approximately 1.151 mph. |
| Korsakovian (K) | X_KVN | A count of attenuation steps or dilution levels representing the homeopathic potency of a substance using the Korsakovian (K) methodof attenuation; commonly denoted as CK1, CK2, CK3, etc.Each centesimal attenuation step represents one part source material combined with 99 parts dilution medium; commonly denoted as C1, C2,C3, etc. |
| Layer | LR | A unit of count defining the number of layers. |
| Linear foot | LF | A unit of count defining the number of feet (12-inch) in length of auniform width object. |
| Linear metre | LM | A unit of count defining the number of metres in length of a uniform width object. |
| Link | LK | A unit of distance equal to 0.01 chain. |
| Liquid pint (US) | PTL | The US liquid pint is equal one eighth of a United States liquid gallon. |
| Liquid quart (US) | QTL | A US liquid quart exactly equals 57.75 cubic inches, which is exactlyequal to 0.946352946 litres. |
| Litre | LTR | A litre is defined as a special name for a cubic decimetre (1 L = 1 dm3 = 1000 cm3). |
| Litre / Day | LD | Litre per day. |
| Litre of purealcohol | LPA | Litre of pure alcohol |
| Litre Per Hour | E32 | Litre Per Hour |
| Litre perkilogram | H83 | Litre per kilogram. |
| Lumen | LUM | Lumen is a measure of the total quantity of visible light emitted by alight source. |
| Lumen Seconds | B62 | Lumen seconds is the SI derived unit of luminous energy. It is based onthe lumen, the SI unit of luminous flux, and the second, the SI base unitof time. The lumen second is sometimes called the Talbot (symbol T). |
| Lumens per Square Meter | B60 | Lumens per Square Meter |
| Lumens Per Watt | B61 | The number of Lumens expressed per watt. |
| Lux | LUX | The International System unit of illumination, equal to one lumen per square meter. |
| Lux Seconds | B64 | Exposure is measured in lux seconds, and can be computed fromexposure value (EV) and scene luminance in a specified region. |
| Megabecquerel | 4N | Megabecquerel: 106 Bq1 Bq is defined as the activity of a quantity of radioactive material in which one nucleus decays per second. |
| Megabyte | 4L | A unit of information equal to 10 (1000000) bytes. |
| Megahertz | MHZ | A unit of frenquecy equal to 106 Hertz |
| Megawatt | MAW | A unit of power defining the rate of energy transferred or consumed when a current of 1000 amperes flows due to a potential of 1000 volts at unity power factor. |
| Megawatt hour(1000 kW.h) | MWH | A unit of energy defining the total amount of bulk energy transferred or consumed. |
| Metre | MTR | The metre is the basic unit of length in the International System of Units (SI). |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Metre Per Hour | M60 | The number of meter per hour the trade item or part of the trade item moves. |
| Metre Per Minute | 2X | Metre Per Minute |
| Metre Per Second | MTS | Defines the speed defined by distance in metres divided by time in seconds. |
| Metric Carat | CTM | Metric Carat |
| Microgram | MC | A microgram is one millionth of a gram (0.000001) |
| Microlitre | 4G | A microlitre is one millionth of a litre |
| Micrometre | 4H | A micrometre is one millionth of a metre, also termed Micron. |
| Micromole | FH | One millionth (10 -6 ) of a mole. |
| Mile (statutemile) | SMI | A statute mile of 5,280 feet (exactly 1,609.344 meters). |
| Mile Per Hour(statute mile) | HM | The number of mile per hour the trade item or part of the trade item moves. |
| Mile Per Minute | M57 | The number of mile per minute the trade item or part of the trade item moves. |
| Mile Per Second | M58 | The number of mile per second the trade item or part of the trade item moves. |
| Miles Per Gallon | X_MPG | Fuel usage by the number of miles the trade item can go on 1 US gallonof fuel. |
| Millesimai (LM) | X_MLM | A count of attenuation steps or dilution levels representing the homeopathic potency of a substance where each attenuation step represents one part source material combined with 49,999 parts dilution medium; commonly denoted as LM1, LM2, LM3, etc. |
| Milliampere hour | E09 | Milliampere hour |
| Millibar | MBR | Millibar- a hundred pascals (10 to the 2nd power) |
| Milliequivalents | MEQ | mEq or milliequivalents, the measure is used in terms of milliequivalents of solute per liter of solvent (or milliNormal where mEq/L = mN). This is especially common for measurement of compounds in biological fluids; for instance, the healthy level of potassium in the blood of a human is defined between 3.5 and 5.0 mEq/L. To better be able to denote the units of measure for nutrients as used in business today. |
| Milligram | MGM | A milligram is one thousandth of a gram (0.001) |
| Milligram perKilogram (mg/kg) | NA | Milligram per Kilogram (mg/kg) |
| Millilitre | MLT | A millilitre is one thousandth of a litre (0.001) |
| Millimetre PerHour | H67 | The number of millimetre per hour the trade item or part of the trade item moves. |
| Millimetre PerMinute | H81 | The number of millimetre per minute the trade item or part of the trade item moves. |
| Millimetre PerSecond | C16 | The number of millimetre per second the trade item or part of the trade item moves. |
| Millimole | C18 | a millimole is one thousandth of a mole. |
| Million International Unit(NIE) | MIU | A unit of count defining the number of international units in multiples of 106. |
| Millisecond | C26 | A millisecond (from milli- and second; abbreviation: ms) is a thousandth (1/1000) of a second. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Minute (unit of time) | MIN | A minute is a unit of time equal to 1/60th of an hour or 60 seconds |
| Mole | C34 | The mole (symbol mol) is the SI base unit of amount of substance; one of a few units used to measure this physical quantity.A mole will possess mass exactly equal to the substance's molecular or atomic weight in grams. That is to say, a substance's atomic or molecular massin atomic mass units is the same as its molar mass in grams. Because ofthis, one can measure the number of moles in a pure substance by weighing it and comparing the result to its molecular or atomic weight |
| Month | MON | Unit of time equal to 1/12 of a year of 365,25 days |
| Most ProbableNumber | MPN | Most Probable Number: is a method of getting quantitative data on concentrations of discrete items from positive/negative (incidence) data.. |
| Mother tincture(Dry material) | X_MTC | A count of a dry crud medical substance Mother tincture, when used for homeopathic preparations, are liquid preparations obtained by the solvent action of a suitable vehicle upon raw materials. The raw materials (medical substance) are usually in the fresh form but may be dried. Mother tinctures for homeopathic preparations may also be obtained from plant juices, with, or without the addition of a vehicle. |
| Nano Seconds | C47 | A nano second is an SI unit of time equal to one thousand-millionth of a second (or one billionth of a second), that is, 10−9 seconds. |
| Nanogram | X_NGM | A nano gram is 10-9 gram or a billionth of a gram.. |
| Nanolitre | Q34 | Nanolitre- Nanolitre is the metric unit of volume equal to one billionth of a litre, which can be represented numerically as 0.000000001/liter. |
| Nanometre | C45 | Nanometre- a billionth of a metre (10 to the negative 9th power) |
| Net kilogram | 58 | A unit of mass defining the total number of kilograms after deductions. |
| Newton | NEW | Newton |
| Newton Metre | NU | Newton Metre |
| Number of cells | NCL | Number of cells |
| Number of International Units | NIU | A unit of count defining the number of international units. The International Unit is a unit of measurement for the amount of a substance, based on measured biological activity or effect.The unit isused for vitamins, hormones, some medications, vaccines, blood products, and similar biologically active substances |
| Number of pairs | NPR | Number of pairs |
| Ohm | OHM | A unit for electrical impedance, the ratio of the voltage phasor to the electric current phasor. |
| Oscillations Per Minute | OPM | Oscillations Per Minute |
| Ounce | ONZ | A unit of mass with several definitions, the most commonly used of which are equal to approximately 30 grams |
| Ounces persquare yard | ON | The weight of one square yard of the material expressed in ounces. Commonly used to express the density or weight of all types of paper, paperboard, and fabric, e.g. 20 OZ or 20 Weight denim has an area density of 20 oz/yd2.The term density here is used somewhat incorrectly, as density is mass by volume. More precisely, it is a measure of the area density, areal density, or surface density. |
| Pad | PD | A unit of count defining the number of pads (pad: block of paper sheets fastened together at one end). |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Page - hardcopy | QB | A unit of count defining the number of hardcopy pages (hardcopy page:a page rendered as printed or written output on paper, film, or other permanent medium). |
| Pair | PR | A unit of count defining the number of pairs (pair: item described by two's). |
| Part per million | 59 | A unit of proportion equal to 10-6 (ppm). |
| Pascal | PAL | The pascal (symbol: Pa) is the SI derived unit of pressure, stress, Young's modulus and tensile strength. It is a measure of force per unitarea, defined as one newton per square metre. |
| Pascal Seconds | C65 | Pascal second ( N s / m 2 ) is the unit of dynamic viscosity which is also known as the absolute viscosity of the fluid. It is the fluids internal resistance to flow . e.g.: water has dynamic viscosity of 1.787 at 273K or 0 degrees Celsius. and 1.002 Pa-second at 293K i.e. 20degrees Celsius. |
| Peck | G23 | A peck is an imperial and U.S. customary unit of dry volume, equivalentin each of these systems to 2 gallons, 8 dry quarts, or 16 dry pints. |
| Penny Weight | X_DWT | A pennyweight (abbreviated dwt or denarius weight) is a unit of mass that is equal to 24 grains, 1⁄20 of a troy ounce, 1⁄240 of a troy pound, and exactly 1.55517384 grams. (Usage- The pennyweight is the common weight used in the valuation and measurement of precious metals. Jewellers use the pennyweight in calculating the amount and cost of precious metals used in fabricating or casting jewellery. Similarly, dentists and dental labs still use the pennyweight as themeasure of precious metals in dental crowns and inlays.) |
| Percent | P1 | A unit of proportion equal to 0.01. |
| Petabyte | E36 | A unit of information equal to $10^{15}$ bytes. 1000 Terabytes = 1 Petabyte |
| pH (potential of hydrogen) | Q30 | The activity of the (solvated) hydrogen ion (a logarithmic measure used to state the acidity or alkalinity of a chemical solution). |
| Picolitre | Q33 | Picoliter is the metric unit of volume equal to a trillionth (one millionth of a millionth) of a liter, which can be represented numerically as 0.000000000001/liter. just as the prefix nano denotes a billionth part. |
| Picometre | C52 | Picometre- a trillionth of a metre (10 to the negative 12th power) |
| Picowatt | C75 | Picowatt is a derived metric SI (System International) measurementunit of power. The picowatt is equal to one trillionth of a watt (10- 12W). |
| Piece | H87 | A unit of count defining the number of pieces (piece: a single item, article or exemplar). |
| Pint (UK) | PTI | A pint (UK) is equal to 1/8 Gallon (UK); used primarly as a measure forbeer and cider when sold by the glass. |
| Pixel | E37 | A unit of count defining the number of pixels (pixel: picture element). |
| Pixel per centimetre | X_PPC | A unit of count defining the number of pixels per linear centimetre as a measurement of the resolution of devices in various contexts; typically computer displays, image scanners or digital camera image sensors. |
| Pixel per inch | X_PPI | A unit of count defining the number of pixels per linear inch (PPI) as a measurement of the resolution of devices in various contexts; typically computer displays, image scanners or digital camera image sensors. |
| Plaque Forming unit(s) | PFU | Plaque Forming unit(s) |
| Point | PNT | A single unit on a scale of measurement as part of an incentive program or pricing structure used as a means of making a quantitative evaluation. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Portion | PTN | Portion |
| Potential RenalSolute Load | PRS | Potential Renal Solute Load |
| Pound | LBR | The international avoirdupois pound of exactly 0.45359237 kilogram. |
| Pound per squarefoot | FP | A non SI unit of Pressure approximately equal to 47.88025 PASCAL's. |
| Pound per squareinch - Absolute | 80 | Psia (pound-force per square inch absolute)is a unit of pressure pressure relative to a vacuum (such as that in space).At sea level, Earth's atmosphere actually exerts a pressure of 14.7 psi. Humans do not feel this pressure because internal pressure of liquid in their bodies matches the external pressure. If a pressure gauge is calibrated to readzero in space, then at sea level on Earth it would read 14.7 psi. Thus a reading of 30 psig, on Earth, on a tire gauge represents an absolute pressure of 44.7 psi (lb/in2). |
| Pound per squareinch - Gauge | 64 | Psig (pound-force per square inch gauge) is a unit of pressure relative to the surrounding atmosphere. At sea level, Earth's atmosphere actually exerts a pressure of 14.7 psi. Humans do not feel this pressure because internal pressure of liquid in their bodies matches the external pressure. If a pressure gauge is calibrated to read zero in space, then atsea level on Earth it would read 14.7 psi. Thus a reading of 30 psig, on Earth, on a tire gauge represents an absolute pressure of 44.7 psi(lb/in2). |
| Pound-force persquare inch | PS | The pound-force per square inch (symbol: psi or lbf/in2 or lbf/in2) is a unit of pressure or of stress based on avoirdupois units. It is the pressure resulting from a force of one pound-force applied to an area ofone square inch. Other abbreviations are used that append a modifier to"psi". However, the US National Institute of Standards and Technology recommends that, to avoid confusion, any modifiers be instead applied to the quantity being measured rather than the unit of measure[1] For example, "Pg = 100 psi" rather than "P = 100 psig". |
| Quart (US dry) | QTD | A US dry quart is equal to 1/32 of a US bushel, exactly 1.101220942715 litres. |
| Retinol ActivityEquivalents | X_RAE | A measure of vitamin A activity based on the capacity of the body to convert provitamin carotenoids containing at least one unsubstituted ionone ring to retinaldehyde. 1 microgram RAE = 1 mg retinol = 12 mg β-carotene = 24 mg other vitamin A precursor carotenoids. |
| Retinol Equivalent (RE) | XRE | A unit used for quantifying the vitamin A value of sources of vitamin A, including both preformed retinoids and precursor carotenoids. Examples include: . One RE is equivalent to 1 mcg of retinol, 6 mcg of Beta-carotene, or12 mcg of other pro-vitamin A carotenoids. . One RE is equivalent to 0.3 International Units of retinol or 0.1 International Units of Beta-carotene. |
| Revolutions Per Minute | RPM | Revolutions Per Minute |
| Roll | XRO | A unit of count defining the number of rolls" where "Roll" is the name of the code value in UN/ECE Recommendation 21, pluralized as appropriate. |
| Sample persecond | X_SPS | A unit of count defining the number of samplings takes during a period of time |
| Second (unit oftime) | SEC | A second is a unit of time equal to 1/60th of a minute. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| Serving | X_SER | A unit of count defining the number of servings being referenced. Thereis a validation limiting the usage of this UoM. |
| Set | SET | A unit of count defining the number of sets (set: a number of objects grouped together). |
| Sheet | XST | A unit of count defining the number of “Sheets” where “Sheet” is the name of the code value in UN/ECE Recommendation 21, pluralized as appropriate. |
| Shipment | SX | A unit of count defining the number of shipments (shipment: an amount of goods shipped or transported). |
| Sizing Factor | FJ | Sizing Factor |
| SQ-E | SQE | Number of allergens based on the SQ-E unit |
| Square centimetre | CMK | A square centimetre is an area of a square whose sides are exactly 1 centimetre in length. |
| Square Decimetre | DMK | An area of a square whose sides are exactly 1 decimetre in length |
| Square foot | FTK | A square foot is an area of a square whose sides are exactly 1 foot in length. |
| Square inch | INK | A square inch is an area of a square whose sides are exactly 1 inch in length. |
| Square metre | MTK | A square metre is an area of a square whose sides are exactly 1 metrein length. |
| Square Metre /Second | S4 | Metre squared per second. |
| Square metre kelvin per watt | D19 | Square metre kelvin per watt .The definition is the thermal resistance (or Rd value) of the material, which is measured by the thickness of the material layer divided by the thermal conductivity of the material. and is expressed in $m^2K/W$. |
| Square mile | MIK | A square mile is an area of a square whose sides are exactly 1 mile in length. |
| Square millimetre | MMK | A square millimetre is an area of a square whose sides are exactly 1 millimetre in |
| Square Yard | YDK | A square yard is the area of a square with sides of one yard (three feet, thirty-six inches, 0.9144 metres) in length |
| Standard Atmosphere | ATM | Standard Atmosphere |
| Stere | G26 | The stere or stère is a unit of volume in the original metric system equalto one cubic metre. The stère is typically used for measuring large quantities of firewood or other cut wood, |
| Tablespoon | G24 | Tablespoon. 1/2 fluid ounces, 3 teaspoons, 15 millilitres |
| Tablet | U2 | A unit of count defining the number of tablets (tablet: a small flat or compressed solid object). |
| Teaspoon | G25 | Teaspoon. 1/6 fluid ounces or 5 millilitres |
| Technical Atmosphere | ATT | Technical Atmosphere |
| Teeth Per Inch | TPI | Teeth Per Inch |
| Ten Thousandthsof an Inch | X_UIN | One Ten Thousandths of an inch or 0.0001 often called a "tenth" in machinery. (Usage- Measurements of some machine parts, gaps in spark plugs). |
| Terabyte | E35 | A unit of information equal to 1012 bytes. |
| Terahertz | D29 | A unit of frenquecy equal to 1012 Hertz |
| Terajoule | D30 | A terajoule is 1012 joules |
| Terawatt hour | D32 | A terawatt hour is 109 * kilowatt hour or 3.6 petajoules. |

## Appendix C: Net Content Unit of Measure – Based on GS1 GDD

| Name | Code | Definition |
|---|---|---|
| The milliequivalencecaustic potash per gram of product | KO | The milliequivalence caustic potash per gram of product. A unit of count defining the number of milligrams of potassium hydroxide per gram of product as a measure of the concentration of potassium hydroxide in the product. |
| Thirty Seconds of an Inch | X SIN | Usage when measuring using some measuring tapes. Commonly used in model making and some hobbies for scaling to full size. Also used in railway applications. |
| Thousand cubicmetre | R9 | Thousand cubic metre |
| | | |
| Thousand Litre | D40 | References SI system of units of measure |
| Thousand piece | T3 | Thousand piece |
| Ton (UK) or longton (US) | LTN | Ton (UK) = 1016 Kg or 2240 Lb. |
| Ton (US) or shortton (UK) | STN | Ton (US) = 2000 Lb or 907 Kg |
| Tonne | TNE | Metric ton = 1000 Kg |
| Torr | UA | Torr |
| Troy ounce orapothecary ounce | APZ | The troy ounce is a unit of imperial measure. In the present day it is most commonly used to gauge the weight and therefore the price of precious metals. One troy ounce equals 480 grains or 31.1035 grams. |
| US Gallon PerMinute | G2 | US gallon per minute |
| Use | E55 | A unit of count defining the number of times an object is used. |
| Volt | VLT | Volt |
| Watt | WTT | A watt is a derived unit of power; one watt is equivalent to 1 joule (J) of energy per second. |
| Watt hour | WHR | The watt-hour is a unit of energy equivalent to one watt of power expended for one hour of time; it is equal to 3.6 kilojoules. The watt- hour is rarely used to express energy in any form other than electrical. |
| Week | WEE | A week is a time unit equal to seven days. |
| Yard | YRD | A yard is It is equal to 3 feet or 36 inches or 0.9144 meter. |
| Yard Per Hour | M66 | The number of yard per hour the trade item or part of the trade item moves. |
| Yard Per Minute | M65 | The number of yard per minute the trade item or part of the trade item moves. |
| Yard Per Second | M64 | The number of yard per second the trade item or part of the trade item moves. |
| Year | ANN | Unit of time equal to 365,25 days. |

## Appendix D: Supply Chain Roles

| Name |
| --- |
| 3rd Party Logistics Provider |
| Distributor |
| Hospital Provider |
| Manufacturer |
| Operator |
| Provider/Dispenser |
| Repacker |
| Solution Provider |
| Undefined |
| Wholesaler/Distributor |

## Appendix E: Organization Types

| Name |
|---|
| AGRICULTURAL_COOPERATIVE |
| BRAND_OWNER |
| BREEDER |
| BROKER_AGENT |
| BUYER |
| BUYERS_AGENT_REPRESENTATIVE |
| CARRIER |
| CASH_TRANSPORT_SERVICES |
| CENTRAL_PAYMENT_SERVICE |
| CHECKING_PARTY |
| CLINICAL_TRIAL_SPONSOR |
| CONSIGNEE |
| CONSIGNOR |
| CONSOLIDATOR |
| CORPORATE_IDENTITY |
| CUSTOMS |
| CUSTOMS_BROKER |
| CUTTER |
| DECLARANTS_AGENT_REPRESENTATIVE |
| DELIVERY_PARTY |
| DESIGNER |
| DESPATCH_PARTY |
| DISTRIBUTOR |
| E_TAILER |
| EMPTY_EQUIPMENT_DESPATCH_PARTY |
| EMPTY_EQUIPMENT_RETURN_PARTY |
| EQUIPMENT_OWNER |
| EXPORTER |
| FACTOR |
| FARM_OPERATOR |
| FATTENER |
| FISHING_OPERATOR |
| FOODSERVICE_DISTRIBUTOR |
| FOODSERVICE_OPERATOR |
| FREIGHT_FORWARDER |
| GOODS_OWNER |
| GROWER |

| Name |
|---|
| HARVESTER |
| HEALTHCARE_PROVIDER |
| IMPORTER |
| INSURER |
| INTERMEDIARY_BANK |
| INVENTORY_CONTROLLER |
| INVENTORY_REPORTING_PARTY |
| INVOICEE |
| ISSUER_OF_INVOICE |
| LOGISTICS_SERVICE_PROVIDER |
| MANUFACTURER_OF_GOODS |
| MARKETPLACE_OPERATOR |
| MINCER |
| OPERATING_DIVISION |
| OPERATOR |
| ORDERING_PARTY |
| OWNER_OF_EQUIPMENT |
| OWNER_OF_MEANS_OF_TRANSPORT |
| PACKER |
| PHARMACY_OPERATOR |
| PRICE_LOCATION_PARTY |
| PROXY |
| PURCHASE_ORDER_RECEIVER |
| RECALL_RECIPIENT |
| RECALL_SPONSOR |
| REGISTERED_AGENT |
| RETAILER |
| SELLER |
| SERVICE_PROVIDER |
| SLAUGHTERER |
| STORAGE_AND_HANDLING |
| SUBSTITUTE_SUPPLIER |
| SUPPLIER |
| TRADER |
| TRANSPORTATION_CARRIER |
| WAREHOUSE_KEEPER |
| WHOLESALER |

## Appendix F: Collaborative Identification Types

| Name |
|---|
| EU_VAT_IDENTIFICATION_NUMBER |
| APE |
| EORI |
| PHYTOSANITARY_NUMBER |
| SEC |
| CAGE |
| DoDAAC |
| LEI |
| APE_NISE |
| NAF |
| RCS |
| SIREN |
| SIRET |
| BFA |
| BIOLAND |
| DEMETER_BUND |
| DEMETER_INTERNATIONAL |
| ECOLAND |
| ECOVIN |
| EPA |
| FDA |
| FSA |
| GAA |
| IFOA |
| IFOAM |
| NATURLAND |
| QAI |
| SUDITIROL |
| USDA |
| DUNS |
| DUNS_PLUS_FOUR |
| EO_ID |
| EST_NUMBER |
| US_EIN |
| US_RSSD_ID |
| US_CRD |
| US_MIC |

| Name |
|---|
| US_UEI |
| US_SCAC |
| US_HTS |
| US_EPA_ID |
| US_FDIC |
| US_CID |
| US_NPI |
| US_DEA |
| US_FEI |
| IFTP |
| US_MFG_ID |
| US_FCC_FRN |
| US_499_Filler_ID |
| US_498_ID |
| US_RN |
| IATA_CODE |
| US_LIC |
| BEA_ID |
| ORG_FOR_INTERNAL_USE_1 |
| ORG_FOR_INTERNAL_USE_10 |
| ORG_FOR_INTERNAL_USE_2 |
| ORG_FOR_INTERNAL_USE_3 |
| ORG_FOR_INTERNAL_USE_4 |
| ORG_FOR_INTERNAL_USE_5 |
| ORG_FOR_INTERNAL_USE_6 |
| ORG_FOR_INTERNAL_USE_7 |
| ORG_FOR_INTERNAL_USE_8 |
| ORG_FOR_INTERNAL_USE_9 |
| FMC_ID |
| GIIN |
| US_FHFA_ID |
| US_MINE_ID |
| US_LAB_ID |
| KVK_NUMBER |
| OIN_NUMBER |
| CRN |
| TIN |
| DID |

## Appendix F: Conditional Attributes

| attributeName | attributeValue |
|---|---|
| Class of Trade 1 | CC |
| Class of Trade 1 | FDV |
| Class of Trade 1 | FO |
| Class of Trade 1 | FP |
| Class of Trade 1 | FPHS |
| Class of Trade 1 | HC |
| Class of Trade 1 | IOE |
| Class of Trade 1 | JV |
| Class of Trade 1 | LLC |
| Class of Trade 1 | NFP |
| Class of Trade 1 | PE |
| Class of Trade 1 | RO |
| Class of Trade 1 | SOE |
| Class of Trade 1 | ST |
| Class of Trade 1 | WFOE |
| Class of Trade 2 | IN |
| Class of Trade 2 | OUT |
| Class of Trade 2 | PH |
| Class of Trade 3 | AA |
| Class of Trade 3 | AB |
| Class of Trade 3 | AC |
| Class of Trade 3 | AD |
| Class of Trade 3 | AE |
| Class of Trade 3 | AF |
| Class of Trade 3 | AG |
| Class of Trade 3 | AH |
| Class of Trade 3 | AJ |
| Class of Trade 3 | AK |
| Class of Trade 3 | AL |
| Class of Trade 3 | AM |
| Class of Trade 3 | AS |
| Class of Trade 3 | NB |
| Class of Trade 3 | NC |
| Class of Trade 3 | ND |
| Class of Trade 3 | NE |
| Class of Trade 3 | NF |
| Class of Trade 3 | NG |

| attributeName | attributeValue |
|---|---|
| Class of Trade 3 | NH |
| Class of Trade 3 | NJ |
| Class of Trade 3 | NK |
| Class of Trade 3 | NL |
| Class of Trade 3 | NM |
| Class of Trade 3 | NN |
| Class of Trade 3 | NO |
| Class of Trade 3 | NP |
| Class of Trade 3 | NQ |
| Class of Trade 3 | NR |
| Class of Trade 3 | NS |
| Class of Trade 3 | NT |
| Class of Trade 3 | NU |
| Class of Trade 3 | NV |
| Class of Trade 3 | NW |
| Class of Trade 3 | NX |
| Class of Trade 3 | NY |
| Class of Trade 3 | NZ |
| Class of Trade 3 | P3 |
| Class of Trade 3 | PA |
| Class of Trade 3 | PB |
| Class of Trade 3 | PC |
| Class of Trade 3 | PD |
| Class of Trade 3 | PF |
| Class of Trade 3 | PG |
| Class of Trade 3 | PH |
| Class of Trade 3 | PL |
| Class of Trade 3 | PM |
| Class of Trade 3 | PN |
| Class of Trade 3 | PO |
| Class of Trade 3 | PP |
| Class of Trade 3 | PR |
| Class of Trade 3 | PS |
| Class of Trade 3 | PW |
| Class of Trade 3 | PX |