Material and Product Naming Conventions in InstantGMP™

Glossary:

Material Name	name of the material as seen in ordering, receiving, use and location management. The material name will be the base for further defining the Product within a project and in turn the MPR Title.
Part #	Number automatically assigned to each material regardless of type and tracked with material name throughout system
Product	Material to be produced in-house using InstantGMP batch record. This can be a WIP, oWIP, or FG. The WIPs can be for further processing or for sale.
WIP	Work In Process – a material that has gone through some processing on site but is not necessarily completed or ready for release and sale.
iWIP	Incoming WIP from another supplier or sister company (can also be defined as a raw material to simplify organization)
oWIP	Outgoing WIP – a WIP that is intended for eventual sale whether at that stage or later after packaging, labeling or any other processing (can also be defined as WIP or FG to simplify organization)
FG	Finished Good – outgoing packaged labeled product for sale or distribution
Classification	Means of organizing incoming vs outgoing materials in InstantGMP; sets the material page with "Batch Unit" instead of "Unit"
Project	A group of similar products named under an umbrella for ease in organization and creating MPRs. Clients and Personnel are also assigned to define projects.
MPR	Master Production Record- Template for batch records defining the product to be made, the yield to be produced, the Bill of Materials (BOM or recipe,) equipment to be used, in-process testing and manufacturing instructions to be performed and verified.

Naming conventions

Mapping out your company/facility's naming conventions is a prerequisite of populating your InstantGMP™ instance with data. We strongly recommend that material names, product names and project structure and project names be considered before entering material names into the database.

Best practice is to involve all affected departments such as production, R&D, document control, warehouse, to make sure all aspects of past and future products are evaluated. InstantGMP™ is 21 CFR part 11 Compliant and therefore records cannot be deleted.

There are character limits on some of the fields such as a 30-character limit on Material names that will be exported to QuickBooks, for example. These items will appear on various screens, reports, printable documents and labels.

Field	Character Limit
Material Name:	60, (30 for QB export)
Project Title:	60, (35 fits on label)
Product Strength:	60
Product Suffix:	60

Material Classifications (incoming raw Materials vs. outgoing Products)

InstantGMP™ allows for all types of materials to be entered in any order. We suggest that you decide on a method for entering materials once you are familiar with the classification system. The classification system divides materials into incoming (generally purchased materials) and outgoing (generally for sale/WIP) categories.

Incoming includes raw materials, ingredients, components, API, packaging, labels, incoming WIP (iWIP-which could be a work in process that your facility has reason to call a WIP rather than a raw material) etc.

Outgoing includes fundamentally outgoing materials such as Outgoing Work-In-Process (oWIP), Work-In-Process (WIP), Finished Goods.

The classification of a material is selected before the material is identified.

Some companies adopt a system to enter all raw materials while they discuss Product naming conventions. Some companies opt to enter all materials necessary for manufacture of a product, as well as the name of the finished good one recipe at a time and slowly add capability to create batches.

You may also opt to use our material data import spreadsheet for automatic data entry into the system.

Material Names:

Materials include the names of Finished Goods, WIPs, raw materials, components and packaging. Designing a uniform way of referring to certain types of materials can make ordering, receiving, searching and traceability that much easier. There is one pathway to enter all types of materials into the system. The classification drop-down allows the user to select whether the material to be named is incoming or outgoing. The system will then offer the correct screen on which to enter data. The incoming material screen has a label for "Unit" whereas the outgoing screen has a label for "Batch Unit," as an outgoing material will be produced by following a batch record:

![INSTANTGMP logo]

Material

Type *	Select Type ▼
Part #	0
Material Name *	[blank] Max. 30 Characters and no colons (:) for QuickBooks Integration
Unit *	Select Unit ▼
Material Id	[blank]
Material Description	[blank]
Cost/Unit	0.000000
Account	InstantGMP Account
Storage Condition *	Select Storage Condition ▼
Recommended Shelf Life	[blank]
QM Retest Period (months)	0.000
Vendor Catalog #	[blank]
Preferred Vendor	Select Vendor ▼

iGMP.TMaterial   **CONFIRM**   **CLOSE**

Material

Type *	Labeled - FG ▼
FG/oWIP Part #	0
Material Name *	Vanilla E-Liquid Max. 30 Characters and no colons (:) for QuickBooks Integration
Batch Unit*	gal ▼
Material Id	V1
Material Description	viscous vanilla scented slightly yellow liquid
Cost/Unit	100.000000
Account	InstantGMP Account
Storage Condition *	Ambient ▼
Recommended Shelf Life	12
QM Retest Period (months)	12

iGMP.TMaterial   **CONFIRM**   **CLOSE**

An important complication to consider when naming materials is whether your facility uses different types of the same material, (e.g. distinguishes between organic and non-organic, USP/food grade, etc.) Another consideration is interim steps and Works in Process (WIPs); If your procedures divide the manufacture of a finished, labeled product into separate MPRs, then each separate product representing the outcome of each stage (MPR) must be entered as materials.

Product Names

Materials representing WIPs/oWIP/FG do not need to have any strength, container, batch size or unit as the materials will be further defined as **"Products"** at a later stage.

First a material to be produced is given a material name as defined by its type, name, Batch unit, storage conditions, cost, shelf life, retest period (as seen in image above)

Note: If a Product line will have more than one strength, do not include strength in the Material name.

Note: If a product will have more than one packaging/size, do not include packaging/bottle type or size in the material name

Note: If new similar products will be added to the product line, avoid adding identifiers to a material name that will cause confusion later, or force you to enter more materials.

Note: There is an inverse relationship between the amount of information in a Material Name and the flexibility of using it to in many product (and therefore MPR titles).

Contemplate what would best describe your product in the various places and contexts it will be used. What does your team want to see on the status change, use (sale) or bin location change screens? How do you want to see the Title of the MPR/BPR displayed on the MPR/BPR summary screens?

In advertising, on websites, from Brand perspective

What is on the label? How does that differ from internal reference?

Does a distributor have a different name or code for this product?

Is there paperwork in place describing the product?

Does your company use an internal code on the production floor?

Is there an R&D formulation ID that could organize things? Or would that be too confusing?

How do your warehouse employees, weigh tickets and Batches currently refer to the product?

Do you plan on adding more products to the line in the future? Will it split or merge projects? How will that affect the ease of differentiating between the current names?

After the material has specifications signed off, it can be added to a project:

Project Definition

General | **WIP/FG Part #** | Client | Personnel

	Part #	Material Name	Version	Product Name

Product Name Selection

[SEARCH] [CLEAR]

Material

	Part #	Material Name	Material Id	Version	Material Types Name Description
+	148	Training oWIP	BCToWiP	2	Bulk - oWIP
+	148	Training oWIP	BCToWiP	1	Bulk - oWIP
+	153	Finished Encapsulated Product	FG-534	1	Bulk - FG
+	162	Labeled Bottle 36mL Nic18 Mild	Lbl btl 21 0136 MP18	1	Packaged/Labeled - FG
+	163	Labeled Bottle 36mL Nic12 Mild	Lbl btl 21 0136 MC12	1	Packaged/Labeled - FG
+	164	Labeled Bottle 36mL Nic06 Mild	Lbl btl 21 0136 MC06	1	Packaged/Labeled - FG
+	172	E-Liquid Bulk Nic 18 Mild Peac	E-Liquid Bulk Nic 18 Mild Peach	1	Bulk - FG
+	173	E-Liquid Bottled Nic 18 Mild P	E-Liquid Bottled Nic 18 Mild Peach 0030mL DC	1	Bulk - FG
+	180	Calcium Tablet		1	Bulk - FG

iGMP.HPuMaterialSpecificationSelector   [CANCEL]

Projects

	Project Title	Description
✎	----	----
✎	23463456	
✎	Biotech Example	Recombinant Protein Production
✎	Bottled starch	Bottle starch product line
✎	CMO Batch Record Review	Review of products manufactured by outside contractor
✎	Dietary Supplement Example	Chewable Vitamin C Pills
✎	E-Liquid Example	E-Liquids in various nicotine levels and PG/VG ratios
✎	Ibuprofen Products	Bottles, pouches & powders
✎	Medical Device Example	Foley Cathetor Tube Manufacturing
✎	new project	
✎	Pharmaceutical Example	Typical Product List for Pharma or Biotech Manufacturer
✎	t	t
✎	Training Project	InstantGMP Training Manual Project
✎	Training Project 7-29-16	Training

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iGMP.HWWProjectDefinition

Or a new project can be created for this product or group of related products.

Multiple material part numbers with material types of WIP, oWIP or FG can be added to a project. (materials can be added to multiple projects as well)

A single part number may be added multiple times as it will further be differentiated by the options to add strength, primary container and suffix.

Strength is an open field that can describe % potency, mg/mL, amount per dosage, etc.

Primary Container is a material defined by its material type of Primary Container, which the product comes into direct contact with. Some companies use the primary container to denote the unit of sale such as box, but it is simplest to use "ea" as it is included in the system.

Suffix can be used to include mLs or # of capsules in a bottle, type of packaging (2-pack, promotional, etc.), regulations (EU/Health Canada,) etc. Each of these fields are optional:

Product Name

Material Part # 259

Material Version 1

Material Name	Strength	Primary Container		Product Name Suffix
Finished Good - Labeled	55%	233	HDPE White Bottle	to ship to distributor

Notes: Product Name is the combination of the material name, strength, container and suffix. Any of the strength, container and suffix fields can be left blank. Each product name combination can be used only once so each combination has to be unique.

HPuProjectMaterialSpecification

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Here three different part numbers were added to a project:

Project Definition

General | **WIP/FG Part #** | Client | Personnel

		Part #	Material Name	Version	Product Name
✏	🗑	258	Finished Good - Bulk	1	Finished Good - Bulk - 55% - Plastic Lined Drum - for further processing
✏	🗑	259	Finished Good - Labeled	1	Finished Good - Labeled - 55% - HDPE White Bottle - to ship to distributor
✏	🗑	260	Finished Good - Packaged	1	Finished Good - Packaged - 55% - HDPE White Bottle - Double pack shrink wrapped

Here the *same* part number was added to the project with differing product definitions:

Project Definition

		Part #	Material Name	Version	Product Name
✏	🗑	282	Vanilla E-Liquid	1	Vanilla E-Liquid - 6 mg/mL - 1 oz Amber Bottle - 30 mL w dropper
✏	🗑	282	Vanilla E-Liquid	1	Vanilla E-Liquid - 0 mg/mL - 1 oz Amber Bottle - 30 mL w dropper
✏	🗑	282	Vanilla E-Liquid	1	Vanilla E-Liquid - 18 mg/mL - 1 oz Amber Bottle - 30 mL w dropper
✏	🗑	282	Vanilla E-Liquid	1	Vanilla E-Liquid - 6 mg/mL - 1 oz Amber Bottle - double pack shrinkwrapped

A project may contain the products in a series of production activities necessary for getting from the raw material to the Finished Good; here we use one customer's example: (please keep in mind that the redundancy of some descriptive words is not necessary and are in parenthesis in the chart below)

Raw Organic Maca Powder – Raw material

Dried Organic Maca Powder –oWIP (they dry in house following an MPR and more processing happened in another MPR)

Packaged Organic Maca Powder – iWIP (they send out for packaging so a third party MPR is followed and that material comes back as an incoming WIP to be used as an ingredient in the next MPR)

Packaged Labeled Maca Powder – FG (they label the packaged goods that come back to the plant after being packaged)

Part #	Material Name	Type	MPR title (based on WIP/FG to be produced)	Used as raw/WIP material in MPR BOM
146	Raw Organic Maca Powder	Raw material	N/A	Dried Organic Maca Powder 5kg
147	Dried Organic Maca Powder	oWIP	Dried Organic Maca Powder 5kg	(3rd party MPR) Packaged Dried Organic Maca Powder
148	Packaged (Dried) Organic Maca Powder	iWIP	(3rd party MPR) Packaged Dried Organic Maca Powder 10 ea 500g pkg	Packaged Labeled Dried Organic Maca Powder 10 ea 500g pkg
149	Packaged (Labeled Dried) Organic Maca Powder	FG	Packaged Labeled Dried Organic Maca Powder 10 ea 500g pkg	N/A

Another example would be an incoming WIP further processed in MPRs in the vape industry:

PG/VG mix from vendor to be "nic'd up" (nicotine added)

Nicotine to be diluted

Diluted nicotine

1. to sell as is
2. and further process (added flavoring)

Vanilla flavoring

Finished product

Part #	Material Name	Type	MPR title (based on WIP/FG to be produced)	Used as raw/WIP material in MPR BOM/recipe:
150	40/60% PG/VG	iWIP or raw	N/A	Nicotine unflavored base 6mg/ml
151	99% nicotine	raw	N/A	Nicotine unflavored base 6mg/ml
152	Nicotine unflavored base 6mg/ml	WIP/oWIP	Nicotine unflavored base 6mg/ml	Vanilla vape juice 6 mg/mL
153	Labeled unflavored base 6mg/mL	oWIP/FG	Labeled unflavored base 6mg/mL	N/A
154	Organic vanilla bean extract	raw	N/A	Vanilla vape juice 6 mg/mL
155	Vanilla vape juice 6 mg/mL	FG	(packaged labeled) Vanilla vape juice 6 mg/mL	N/A

Project Titles

Projects are umbrellas of like-products. The likeness can be that they are (for example):

1. Special formulations of your best products made for a certain client
2. Endpoints of MPRs in a workflow to get from raw to labeled Finished Goods (see 147, 148, 149 above)
3. All products in a product line
4. All products produced the same way
5. All strengths of a vape juice flavor
6. All flavors of the same strength vape juice
7. Products used for further in-house processing and are labeled for sale from a common endpoint (see 152 and 153 above)

MPRs

Master Production Records are essentially titled by their Product names but also include the project title, theoretical yield and client. This makes traceability easy but requires forethought before committing to a plan for a naming convention.

Each MPR describes the process of creating a finished product or WIP and is identified as such. The MPR is identified by:

Project,

Product Name (material name, strength, primary container, suffix)

Theoretical yield,

Formulation ID

Client

Thinking ahead saves time and builds a logical system that will stand the test of employee turnover and product development. Starting with what you want to see in the end and working backwards is a great approach to this. What do you want to see on your MPR cover pages?