Scope: This procedure is developed to align new product development practices in the facility. This applies to new product development activity or any revision with respect to changes in recipe or changes in processing techniques.

Objective:

To establish a standardize procedure to develop new product.

Reference: OSI Policies.

Responsibility: NPD / R&D department is responsible for recording & maintain all necessary document with help of other departments. Whole set of documentation should be kept /maintained for three years (At least). All functional roles should comply and provide feedback to R & D project Lead in timing manner. Commercial team shall co-ordinate with Operations, R & D, Engineering, Sales and Finance. Core Process Team for commercialization & decision making shall be:

Sr. #	Commercialization Team	Department	Role
01	Sushil Sawant	Sales	■ Clarity on future plans or new product ■ Confirm decision basis capability and infrastructure ■ Provide sufficient time to Operations to gear up before commitment to customers ■ Support Operations by means of Capex approval for infrastructure needed to produce a new product ■ Review the proposals of new product and guidance in decision of "Yes" or "No" ■ Support in convincing customer on our capabilities and avoiding giving over commitments
02	S Rao	Commercials	
03	Manjunath Patil	GM	
04	Dr Sunil Nalavade	Operations	
05	Shashank Joshi	QA	

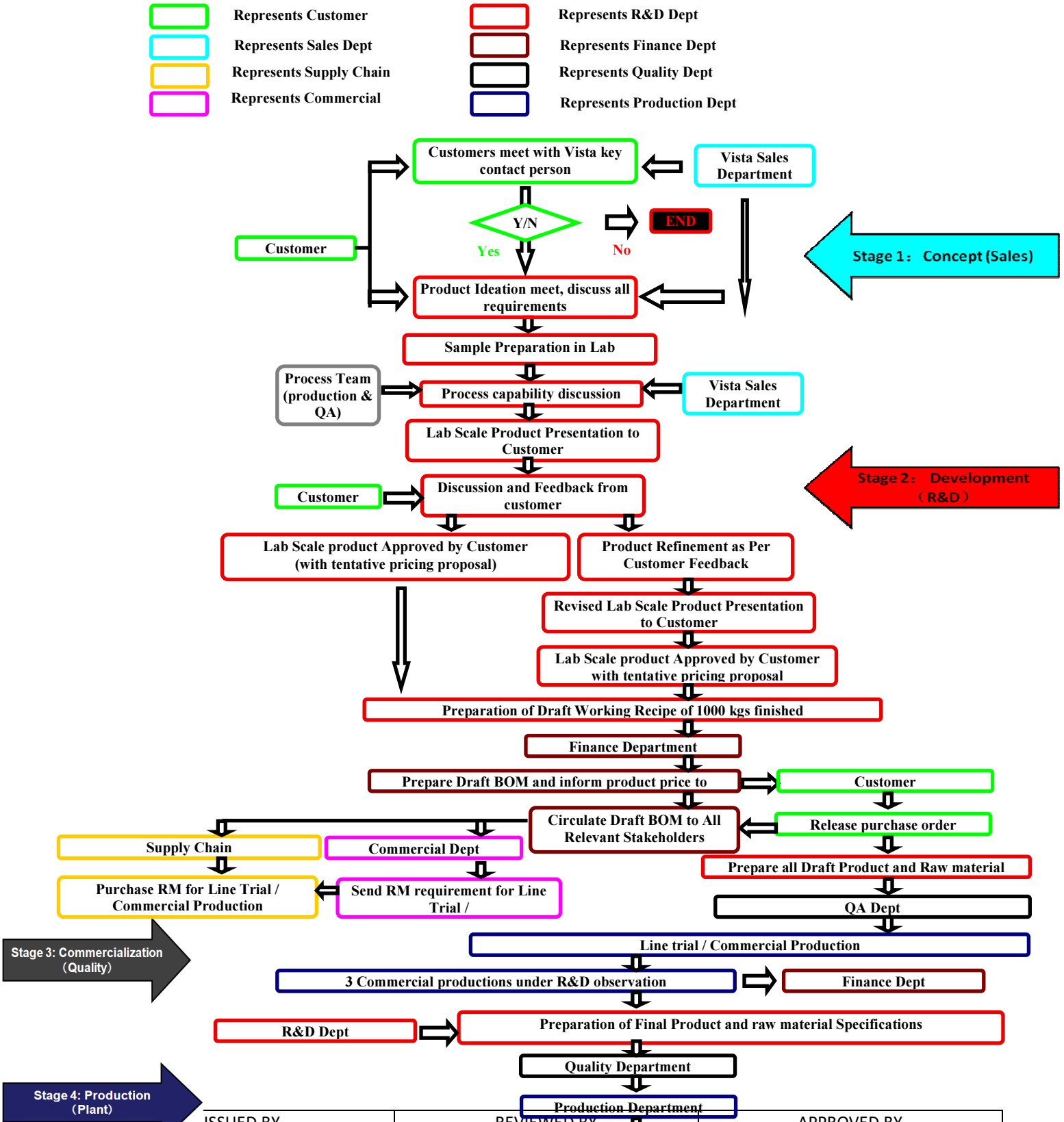
Operation Team

Sr. #	Department	Lab Sample	Trial
01	Technical services	■ Evaluation of New Raw materials, and formal documentation of New RM ■ Review of ingredients with QA before line trial order for RM with emphasis of natural ingredients as much as possible ■ Getting RM specs from supplier and Creation of new RM Specs (draft) as per vista ■ Ideation session with Sales and Customer and its documentation ■ Propose Shelf life of new product theoretically before confirmation through real time study ■ Conduct Shelf life studies on lab/line trial samples ■ Cooking and holding study validations of lab/Line trial samples, ■ Providing theoretical Nutritional values for new product ■ Initiate HACCP review for new product with help of QA and its documentation before line trial	■
02	Plant QA	■ Support in New RM /ingredient review before lab and line trials ■ Support in creation of RM specs ■ Involvement in Line trial and provide observations about online check/parameters ■ Identification of CTQ's with help of NPD/R&D for given product during trial runs ■ Identify and conduct online checks/testing of product ■ Coordination of HACCP review with NPD/R&D for new product and its documentation ■ Support in making 23 point checklist / line trial documents to NPD ■ Support in Ingredient declarations/Labeling Online routine	■

		monitoring of product characteristics and suggest changes to NPD	
03	Production	■ Understand the product process flow and suggest changes if any ■ Support NPD to design form plate/equipment design/requirement ■ Involvement in Line trial and provide observations about loss/yields, suggest changes in process steps/flow ■ Identification of CTQ's with help of QA for given product during trial runs ■ Support in HACCP review, Online HACCP flow chart verification ■ Compliance to food safety requirements/Recipe/process flow during line trials/consecutive commercial production ■ Production planning for line trials with help of NPD ■ Provide support in development of packaging/pouches/cartons ■ Provide feedback/changes needed in product/flow/recipe to NPD and sign off Handover of new product	■
	NPD	■ Support in project of Good food concept – alternative materials or alternative RM ■ Making the Ingredient labeling/product labels and changes there in ■ Product specification sign off from customer after 3 Non consecutive trials ■ Handover of product to Production/QA/Operations ■ Support in Specs uploading on Customer portals ■ Support in any bottleneck resolution for product characteristics	■
	NPD	■ Make Lab samples ■ Align with customer expectations ■ Co operate and complete checklist with QA ■ Complete BOM with QA/ Operations	■ Document handover with QA ■ Participate trial run fully ■ Evaluate line sample compared with target

		and provide to finance Dept. ■ Provide Draft production process and specs to production as well as to QA	sample ■ Approve (If line sample meets customer expectations ■ Participate in draft specs and process
	Supply Chain	■ Review Raw material ■ Ensure sufficient Supply ■ Provide short and long term price ■ Provide lead time for all materials	■ Ensure sufficient supply ■ Provide short and long term price ■ Provide materials for trial runs
	Operations	■ Access whether production ■ Sufficient Capacity ■ Study production process with QA ■ Provide estimated labor efficiency	■ Complete trial run with QA ■ Conduct sustainability and safety impact assessment ■ Provide labor efficiency to production plan ■ Provide BOM usages & labor cost to finance ■ Design operation documents and forms
	Finance	■ Input fixed expense ■ Calculate estimated price ■ Provide indicative pricing	■ Input fixed expense ■ Price accounting
	QA	■ Review food safety assessment ■ Regulatory scan ■ Access mode of production ■ Qualification Audit of facility	■ Food safety assessment & Regulatory scanning ■ Complete trial runs with operations ■ Complete quality documents ■ Complete QA Control form ■ Keep Target sample ■ Complete Specification

Process Flow & Key Development Stages



Key Process Description:

Stage 1: Concept / Project Initiation (Sales)

1. Any project implemented by vista must be approved from Head Operation, R&D head, Sales head & QA Head upon received prior resource dedications. Supportive documents shall be maintained such as client brief, Meeting Minutes etc.
2. A timeline of 60 days from initial conceptualization to final product delivery is confirmed when the product does not need any special equipment/process/Capex or in case of a new product based on existing capabilities.
3. In case of a product design goes into iterations /changes, then a timeline will be 45 days maximum (from the date when customer confirms product design/concept) to final/ commercialize the product.
4. Following details / dates (Tentative) must be initiated by Head while project initiating meeting. A specific timeline shall be placed and updated by R&D head by indicating anticipated dates for following activities.
    - Cutting with Internal Team
    - Cutting with client
    - Trial Run
    - Commercial Production

Note: In case of totally new concept/design of product, product commercialization will be based on closure of gap (i.e equipment/processing site up gradation etc).

Stage 2 Developments (R & D)

1. **Preparation of Sample:**

   Lab sample shall be prepared by R & D Team

2. **In-house sensory**

   This handmade sample shall be sent for client review with approval of sales lead & R&D after in house sensory by QA head and operations. Each cutting result shall be recorded indicating the next step to be taken for further improvements by individual customer. Sensory sheets must be developed prior to in house sensory & may be modified from customer

Note: On Line Trial samples shall be produced after having an approval from Operation head, R & D, procurement (Supply chain), QA head & sales A quotation base formula from procurement must be communicated with related client prior sample production

3. Cooking Validation and holding study

For McDonald / BK cooking validation must be done with customer before processing commercial product. 200 samples shall be evaluated for McD & 30 in numbers shall be evaluated for BK. For other customers minimum 30 samples to be evaluate from first line trial. Report can be shared upon request.

4. Sensory Alignments:

For McDonald follow SQMS suggested protocol of product cutting. Sensory sheets must be prepared prior to in house sensory & may be modified after comments by appropriate customer.. For others same criteria must be followed.

5. Transfer Plan to Mass/ commercial production

Confirmation of receiving sops/Specifications/Cutting standards/QA Flow must obtained from all departments prior executions.

A documented plan shall establish stating clearly that on what condition and parameter R & D could release the product from involvement of mass production with Consistency in quality which is recorded. (Considering the records of past two or three mass/ commercial runs)

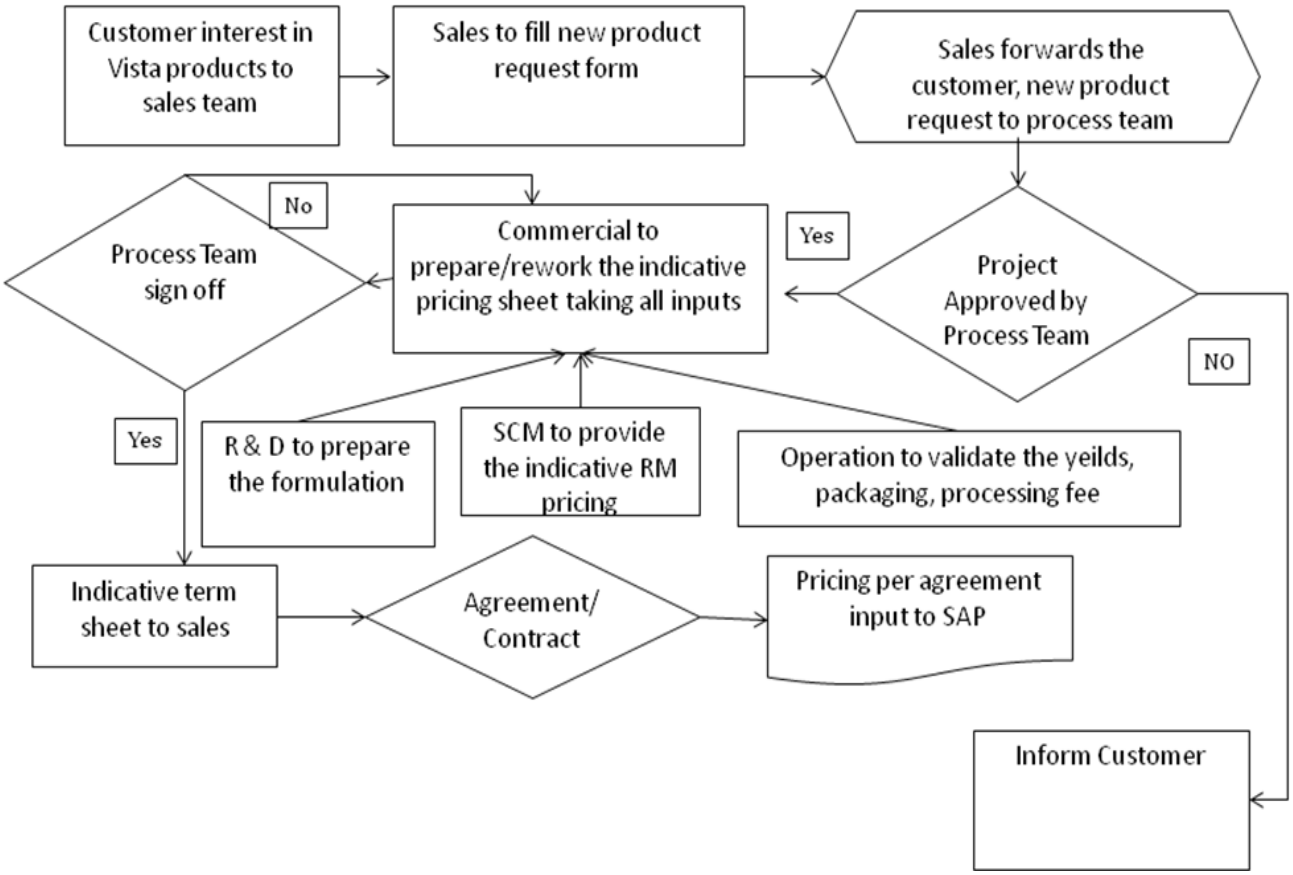
- Process team will meet on the proposals to review the commercialization approvals.(As & when require)
- Indicative pricing, final pricing will be prepared by commercial personnel using Pricing guidelines and final approval will be taken from process team.
- NDA, Contract and agreement will be reviewed by legal team.

  (**Note:** Any product specific investment or process change should be charged as incremental cost at customer end)
- Initial request to be accompanied by following details :

  1. product profile,
  2. Target customer,
  3. Expected volume.

  (**Special consideration**: Work on mail request is avoided. It should be communicated in the meetings to identify key issues & develop marketing strategies.)

Process Flow:



Step 01- New Product Introduction/Development

1. Consider use of existing ingredients and suppliers of new ingredients.
2. For new ingredients year round availability shall be considered.
3. Preliminary quotes to customers should have final negotiated price of any new ingredients.
4. If any inhouse prepared ingredient is considered then a formal approval of concerned plant manager should be taken.
5. Any product development request will be consider as ultimate only after sign off by Process owner /process team.

Step 02 - Product Pricing & Approval

1. Product pricing shall be prepared based on recipe of final approved product from customer.
2. Recipe will be submitted to commercial (by R & D head and it should be accompanied by product process flow)
3. Forecast raw material price shall be used.
4. Yields of existing similar products can be used during the activity of product pricing.
5. Processing cost and Margin at the discretion of process team.

Note: Only Commercial head is authorized to approve the product pricing.

Step 03 - Submission of Preliminary Quote

1. Any product presentation to customer should be accompanied by preliminary quote.
2. Any changes in preliminary quote can be made only by Commercial Head.
3. Only authorized person from sales can submit preliminary quote.
4. While changing preliminary quote, Limits of authorities related to product pricing guidelines shall apply.

Step 04 - Preparation of Bill of Material

1. Product and price should be approved by the customer.
2. Bill of material should be prepared based on the recipe prepared by R & D only of the final customer approved product.
3. Bill of material to be forwarded to be updated in SAP along with approved price list.
4. Only Commercial Head can forward the BOM for updating into the system (SAP)
5. BOM should be accompanied by approved price list.

Step 05 -Trial Run

1. R & D department will issue draft specs to production department as well as to QA department for trial purpose.
2. Approved bill of material should be the base on trial production.
3. Product trials shall be performed only with prior approval of Process Team
4. R & D will have to provide actual usage and actual output of material after the trial.
5. Trial production cost should be match the indicative price submitted to customer.
6. R & D is responsible for Trial run Cost and should not exceed monthly/YTD budget, if exceeding have to take an approval of CEO prior to perform the task.

Note: Every Thursday of the month is dedicated for the trials by NPD (Veggie Products)
it can be taken twice in month at any Thursday Fortnight (Chicken Products)

Step 06 - New product request form by Process Team (Format is Attached)

1. Process team shall consider following things while preparing **New product Request**
    - Existing capabilities,
    - customer potential,
    - Volumes while deciding on new product request form/ improvement in existing products.

Step 07 - New Product commercialization **(Format is Attached)**
Commercialization checklist with detailed summary of individual product will be filled up by NPD Team.

Step 08 - New RM Approval
Check Ingredient declaration Approval from QA/R & D/supply chain /Plant operation before placing order for line trial
For new supplier basis on food safety risk evaluation & confidence supplier can be approved conditionally
Supplier must be audited within three months & give full authorization. till final authorized approval.
R& D should provide tentative specs to QA to convert into formal specification (Ref.RM Specs approval Process)

Vista New Product Request Form

Product Name:	

Pricing Requirement

Needed Pricing (kg)		Portion size(Wt.)	
Cost of Goods(Factory)		Piece Cost	
Piece size (Wt.)		Portion cost	
Portion size(Pieces)			

Volume Forecast (First 5 Months and Annalized)

Month

I st	IV th
II nd	V th
III rd	Annalized

Originator not to fill out section below

Actual Completion Date	
Actual Cost of Trials	
Approvals	

Special consideration:

Formula Modification (If Applicable)

At the time of formula modification an approval must be obtained by Operation Head, R & D Head, and Operations (Production) & Procurement head

Supporting documents must be available & maintained by R & D Head such as –

1. Client comments,
2. Technical Team discussion summary at the time of Final approval process.

Vista Processed Foods Pvt. Ltd.
New Product Commercialization Checklist

Date:		**By:**	
Product Name :		**Customer:**	
Target Launching Date:			
Item Number& Pack / Size			
Product Description	**Pack /size per inner box**	**Tie**	**High**	**CS/ Pallet**

Sr. #	Dept	Sub #	Points	Description (V/x)	
I	**R & D**				
		1	New ingredients used for this product		

List of new ingredients

Sr. #	Ingredient Description	Supplier	Letter of Guarantee	Specification
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

2	Capability test run?		
3	Recipe confirmed?		
4	BOM Finalized?		
5	Process Flow confirmed?		
6	Target shelf life		
7	Refrigerated or frozen product		
8	Label Approved?		
9	Ingredient statement completed?		
10	Preparation Directions completed?		
11	Nutritional facts completed?		
12	Allergen statement completed?		

Sr. #	Description	Allergens
1		
2		
3		
4		
5		
6		

13	Customer Final Approval		
II	**Quality Assurance**		
1	Food Safety risk assessment Summary:		
2	Quality control Parameter Summary		
3	Special process control Summary		
4	Change to HACCP Summary		
5	New ingredient review completed ?		
6	New Supplier Qualification?		
7	Product Chemical Test completed ?		
8	Product Microbial Test completed?		
9	Finished product specification?		
10	Label review and approval		
11	Shelf life testing completed?		
12	Mock sample review completed?		
13	Product Coding Individual Unit: Poly packing: Master Case:		
III	**Purchasing**		
1	New ingredient and item number assigned?		
2	New packaging and item number assigned? Preprinted poly bags : Master cartons		
3	Information requirements from new suppliers?		
IV	**Production**		
1	First production run scheduled? Date & Shift::		
2	Special assembly tools or utensils needed? Requirements		
3	Product filling and packaging configuration ? A. Unit fill weight B. Unit per case C. Palletizing configuration		
V	**Warehouse**		
1	Target ship date ?		
2	Special product shipping requirements?		
3	Raw material storage concern?		

New Product Commercialization Summary

Date of Issuing: _____ **By:** _____

Production start Date : _____

I General product Information:

Description : _____ Brand: _____

Pack/ size : _____

Recipe # : _____

Shelf Life: _____ Guaranteed Shelf Life: _____

Product storage: _____ Frozen: _____

XYZ Printed film : _____ Primary Packaging : _____

Master Case : _____ Master case label : _____

Palletization : Tie High Total: _____

Unit Net Wt: _____

Case Net Wt:. _____

Coding : _____ Sell By :DD MM YYYY _____

Poly Bag : _____ Sell By :DD MM YYYY _____

Master case coding : _____ Sell By : Sell By :DD MM YYYY _____

Others : _____

II Quality Control ranges

Component and shelf life: _____

Manufactured Assembly _____

Assembly sequence and _____

Wrapper Quality: _____

Coding : _____

III Special Process Control

WIP Internal Temperature _____

Product Internal _____

Others _____

IV Others

_____

_____

Revision Status

Sr. #	Rev. #	Revision Date	Revised Matter
01	00	00	Issued
02	01	04/05/2017	Reviewed and updated