



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

Name of Facility / Equipment / Utility / System / Activity / Procedure / Unit Operation for: Manufacturing (OSD)

Date Of Quality Risk Assessment:

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
1.	Material Staging after dispensing	Cross Contamination	Product Failure	<ul style="list-style-type: none"> ➤ During the transfer sugar bag opens and sugar transfer activity is performing. ➤ There is no physical segregation available ➤ No over gowning procedure is available for sugar transferring area as the person is directly come in contact with material. 	<ul style="list-style-type: none"> ➤ Dispensed material is kept in tightly closed double polybags. ➤ Segregation and Controlled area provided for storage of material. Only authorized persons allowed in the area. ➤ Secondary gowns and Gowning procedure is available for all person 		4	3	1	12	NA	NA	NA	NA	NA
2.		Probability of mix up of material after dispensing	Mix up changes of different dispensed materials. Product failure.	<ul style="list-style-type: none"> ➤ Proper labeling is not done in each container of materials. ➤ Material transfer procedures are not available. ➤ Material is transferred by untrained personnel. ➤ Provision of controlled 	<ul style="list-style-type: none"> ➤ All bags/containers of materials properly identify by status label. ➤ Material is transferred to production area via staging room. ➤ Material is transferred by trained personnel. ➤ Controlled area provided for 		4	4	1	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Batch Manufacturing			storage is not available. ➤ Procedure is not available for material movement.	storage of material. Only authorized persons allowed in the area and procedure is available for Material movement										
		Probability of use of Un-clean dress in manufacturing Area	Increase in microbial load in manufacturing and product failure	<ul style="list-style-type: none"> ➤ Procedure is not available for Cleaning of manufacturing & filling Area Garments. ➤ Garments cleaning are performed by untrained personnel. ➤ In-adequate cleaning of Dress. ➤ Garments Storage Cabinets are not provided for Storage of Garments 	<ul style="list-style-type: none"> ➤ Cleaning Procedure is available. ➤ Cleaning is performed by trained personnel. ➤ Storage Cabinets are provided for storage of garments. ➤ Garment cabinet for cleaned garments and Bin for used garments provided in change rooms. SOP for entry and exit procedure available. 		4	2	1	8	NA	NA	NA	NA	
		Foreign particles may enter during batch manufacturing area.	Product failure.	<ul style="list-style-type: none"> ➤ Procedure is not available for Entry and Exit Procedure for Production Area (Tablet & Capsule & TDP) ➤ If pressure differential is not maintained. 	<ul style="list-style-type: none"> ➤ Procedure is available for Entry and Exit Procedure for manufacturing Area (Tablet & Capsule & TDP) ➤ Pressure differential is maintained properly & monitoring properly & monitoring at 		4	1	4	16	NA	NA	NA	NA	



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Batch Manufacturing			<ul style="list-style-type: none"> ➤ Area is not provided with air locks. ➤ Area & HVAC is not qualified. ➤ Activity is performed in Uncontrolled/Unclassified Area. ➤ Untrained / Unqualified personnel are allowed in the area. 	<ul style="list-style-type: none"> ➤ Area is provided with air locks. ➤ Area & HVAC is qualified. ➤ Activity is performed in controlled/classified area. ➤ Untrained personnel are not allowed in the area. 										
		Probability of missing of one or two material during transfer of material from warehouse	Product failure.	<ul style="list-style-type: none"> ➤ If material not verified before processing the batch 	<ul style="list-style-type: none"> ➤ Verification of material by store and QA in dispensing & production and QA in manufacturing area is in practice. ➤ Batch manufacturing is performed in the presence of QA & Production personnel. 	BMR of Product	2	1	4	8	NA	NA	NA	NA	NA
		Probability of microbial contamination during manufacturing activity	Product Failure.	<ul style="list-style-type: none"> ➤ If Manufacturing equipments (FBD Blender, Compression Machine, Tablet Dedusting Machine,, Sifter, Multi Mill) & Accessories are not cleaned properly ➤ If untrained person performing activity. 	<ul style="list-style-type: none"> ➤ Proper Cleaning activity is performed before manufacturing of batch. ➤ Only trained person performed all the activities. 		4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Batch Manufacturing			<ul style="list-style-type: none"> ➤ Cleaning procedure not available ➤ Separate Cleaned Equipment Storage area is not provided. ➤ Proper Status of Labeling is not done in each cleaned & container after washing. 	<ul style="list-style-type: none"> ➤ Only authorized person allow in manufacturing area. ➤ SOP for cleaning is available. ➤ Segregated Cleaned Equipment Storage area is provided. ➤ Proper Status of Labeling is done in each cleaned & container after washing. 										
		Probability of increase in bio burden in the area	Product Failure	<ul style="list-style-type: none"> ➤ If cleaning is not performed as per recommended SOP. ➤ If gowning procedure is not followed. ➤ If environment condition not as per requirement. ➤ If batch change over process not followed as per SOP. ➤ Procedure is not available for sanitization of drain. ➤ Procedure is not available for cleaning of floors & wall. ➤ Wash/Rinse sample not 	<ul style="list-style-type: none"> ➤ Cleaning performed as per SOP. ➤ Gowning procedure followed as per SOP. ➤ Manufacturing process performed under controlled condition and record maintained. ➤ Wash water analysis performed as per SOP during product change over. ➤ Procedure is available for sanitization of drain. ➤ Procedure is available for cleaning of floors & wall. ➤ Wash/Rinse sample send to QC for analysis. 		4	1	3	12	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
				send to QC for analysis.											
		Variation in particle size distribution during granulation	Poor compaction properties ,poor flow of granules , Poor homogeneity.	<ul style="list-style-type: none"> ➤ Variable granulation end point ➤ Incorrect equipment ➤ Wrong screen sizes used ➤ Person not trained to performed the activity 	<ul style="list-style-type: none"> ➤ Proper screen size taken during milling and sifting process as per BMR ➤ Granulation done as per BMR instruction and as per SOP of equipment and area. ➤ Only trained persons performed all the activity. 	Batch manufacturing Record	4	1	3	16	NA	NA	NA	NA	
3.	Blending	Probability of improper cleaning	Contamination & product failure	<ul style="list-style-type: none"> ➤ Blender is not qualified. ➤ Blender is not working properly. ➤ Preventive maintenance schedule is not available & followed. ➤ Activity is performed by untrained personnel. ➤ All washing process not done on controlled area. 	<ul style="list-style-type: none"> ➤ Blender is qualified. ➤ Blender is working properly & preventive maintenance schedule available & followed. ➤ Blender checked daily as per provided check list. ➤ Activity is performed by the trained personnel. ➤ All washing process done on controlled area. 	Qualification Protocol	4	1	2	8	NA	NA	NA	NA	
		Probability of improper working of blender	False result	<ul style="list-style-type: none"> ➤ Blender is not qualified. ➤ Blender is not working properly. ➤ Preventive maintenance schedule is not available & followed. ➤ Activity is performed by untrained personnel. 	<ul style="list-style-type: none"> ➤ Blender is qualified. ➤ Blender is working properly & preventive maintenance schedule available & followed. ➤ Blender checked daily as per provided check list. ➤ Activity is performed by the 		4	1	3	12	NA	NA	NA	NA	



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
					trained personnel.										
		Probability of microbial contamination in product through machine parts	Product failure	<ul style="list-style-type: none"> ➤ If machine parts are not cleaned properly. ➤ If untrained persons performing activity. ➤ Procedure in not available for handling of Machine Parts. ➤ Cleaning of change parts not done properly 	<ul style="list-style-type: none"> ➤ Verification of cleaning of machine parts by QA. ➤ Only trained persons performed all the activity. ➤ Procedure of handling of change parts is available. ➤ Cleaning of change parts done properly 		4	1	4	16	NA	NA	NA	NA	NA
		Variation in particle size distribution	Poor compaction properties ,poor flow of granules , Poor homogeneity.	<ul style="list-style-type: none"> ➤ Variable granulation end point ➤ Incorrect equipment ➤ Wrong screen sizes used ➤ Person not trained to performed the activity 	<ul style="list-style-type: none"> ➤ Proper screen size taken during milling and sifting process as per BMR ➤ Granulation done as per BMR instruction and as per SOP of equipment and area. ➤ Only trained persons performed all the activity. 	All SOP of Manufacturing Area	4	1	2	8	NA	NA	NA	NA	NA
4.	Compression	Probability of improper working of machine	Contamination & product failure	<ul style="list-style-type: none"> ➤ Compression machine is not qualified. ➤ Compression machine is not working properly. ➤ Preventive maintenance schedule is not available & followed. ➤ Activity is performed by untrained personnel. ➤ Defects not checked for 	<ul style="list-style-type: none"> ➤ Compression machine is qualified. Calibration done of all gauzes and other on routine basis ➤ Compression machine is working properly & preventive maintenance schedule available & followed. ➤ Compression machine 	Qualification Protocol	4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
				its appearance or shape/size ➤ Change parts like hopper, chute are not cleaned. ➤ Procedure is not available for Inspection, Handling, Polishing and Destruction of Punches and Dies	checked before taking product as per provided check list. ➤ Activity is performed by the trained personnel. ➤ Visual checks in different time interval for visual defects. ➤ Change parts like hopper, chute are cleaned after completion of batch manufacturing activity. And rinse water sample send to QC department for analysis. ➤ Procedure is available for Inspection, Handling, Polishing and Destruction of Punches and Dies										
		Probability of defects in compressed tablets	Market Complaint	➤ Proper setting of machine is not done. ➤ If compression machine not checked. ➤ Non availability of metal detector. ➤ Punch not cleaned properly by operator ➤ In process or machine run by untrained persons.	➤ Initial setting parameter is checked by the Operator and Production Personnel for proper setting of the machine before starting batch. ➤ Initial parameter also verified by QA Personnel. ➤ SOP for operation of metal detector is available. ➤ Proper cleaning of machine	Qualification Protocol	4	1	3	12	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
				<ul style="list-style-type: none"> ➤ If In-process not done at regular interval by trained person. ➤ Compression machine is not qualified 	<ul style="list-style-type: none"> parts before every batch. ➤ Only trained person performed the in- process. ➤ Regular in-process checks are performed by the production and QA. ➤ Compression machine is qualified 										
5.	Coating	Probability of improper working of machine	Contamination & product failure	<ul style="list-style-type: none"> ➤ Coating machine is not qualified. ➤ Coating machine is not working properly. ➤ Preventive maintenance schedule is not available & followed. ➤ Activity is performed by untrained personnel. ➤ All washing process not done on controlled area or area not specified for washing of equipments. ➤ Procedure for cleaning is not available and followed 	<ul style="list-style-type: none"> ➤ Coating machine is qualified. ➤ Coating machine is working properly & preventive maintenance schedule available & followed. ➤ Activity is performed by the trained personnel. ➤ Calibration done of all gauzes and other on routine basis ➤ All washing process done in controlled area. ➤ Dedicated area provided for washing of equipments. ➤ Procedure for cleaning is available and followed 	Qualification Protocol	2	1	4	8	NA	NA	NA	NA	NA
		Probability of microbial contamination	Product failure	<ul style="list-style-type: none"> ➤ If machine parts are not cleaned ➤ If untrained persons 	<ul style="list-style-type: none"> ➤ Machine parts are cleaned before using in process. Procedure of handling of 		4	1	2	8	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Coating	n in product through machine parts		<ul style="list-style-type: none"> performing activity. ➤ Procedure in not available for handling of Machine Parts. ➤ Storage of machine parts 	<ul style="list-style-type: none"> change parts is available. ➤ Only trained persons performed all the activity. ➤ Verification of cleaning of machine parts by QA. ➤ SOP for cleaning & storage of machine change parts accessories. 										
		Probability of microbial contamination in product though coating solution	Product failure	<ul style="list-style-type: none"> ➤ If equipment used for preparing coating solution not cleaned. ➤ If untrained person performing activity. ➤ Solution not filter before using in coating ➤ Persons doing work in coating area are not qualified ➤ Door interlocking is not present to prevent cross contamination ➤ Unidirectional Men Material Movement / Flow are not maintained. 	<ul style="list-style-type: none"> ➤ Equipment are cleaned Verification of cleaning is bone by QA. ➤ Only trained person performed all the activity. ➤ Solution filtered through muslin cloth or as define in the BMR of respective procedure. ➤ All persons doing work in coating area are trained. ➤ Door interlocking is present to prevent cross contamination ➤ Unidirectional Men Material Movement / Flow are provided. 	Personal Training Record	4	1	3	12	NA	NA	NA	NA	NA
		Probability of defects in coated tablets	Market Complaint & defects into the	<ul style="list-style-type: none"> ➤ Proper setting of machine is not done. ➤ If spray gun and coating pan not 	<ul style="list-style-type: none"> ➤ Initial setting parameter is checked by the Operator and Production Personnel for proper setting of the 	Visual Inspector	4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Coating		product	<p>checked.</p> <ul style="list-style-type: none"> ➤ If In-process not done at regular interval by trained person. ➤ Procedure is not available for controlling visual defects. 	<p>machine. Proper cleaning of machine parts before every batch.</p> <ul style="list-style-type: none"> ➤ Initial parameter also verified by QA Personnel. ➤ Only trained person performed the in- process. ➤ Regular in-process checks are performed by the production and QA. ➤ Visual checks performed in different time intervals. 	Qualification									
		Probability of weight variation	Weight variation and product failure during QC testing	<ul style="list-style-type: none"> ➤ Tablets not checked for tablet weight. ➤ In-process checks not performed. ➤ Weight variation not performed. ➤ Activity is performed by untrained personnel. ➤ Balance is not calibrated ➤ Proper setting of machine is not done by operator initially. 	<ul style="list-style-type: none"> ➤ Weight Variation of all the parameters at initially and defined frequency is performed for tablets by trained personnel as it is part of BMR. ➤ In-process checks performed at frequency defined in BMR. ➤ Weight variation performed at regular frequency. ➤ Activity is performed by trained personnel. ➤ Daily verification and monthly calibration is in practice. ➤ Calibrated weighing balance 	BMR	4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Coating				is used for weighing, ➤ Machine setting parameters checked by operator & production personnel before starting the Coating activity.										
		Probability of Product Mix up (Quarantine Area)	Product mix up	<ul style="list-style-type: none"> ➤ Batches are not segregated with proper status labeling. ➤ Labeling not done in the container in which product is placed. ➤ Unauthorized/untrained entry in quarantine area. ➤ Lock and key arrangement not available for access of unauthorized person entry. 	<ul style="list-style-type: none"> ➤ Pallets are provided for segregation of different batches and different products. And also status label put on all carats ➤ Access of authorized persons only is there in quarantine area. ➤ Logbooks are maintained for filled product/Good products inwards and outwards of different products. ➤ Quarantine room shall be lock & key arrangement & Access of authorized persons only is there in quarantine area 	Authorized Persons List	4	1	2	8	NA	NA	NA	NA	NA
6.	Visual Inspection	Probability of mix-up of Rejected tablets in Good tablets Container	Product Failure / Market complaint	<ul style="list-style-type: none"> ➤ Tablet/capsule Inspection machine is not qualified. ➤ Visual Inspectors are not trained for sorting of tablets/Capsule. 	<ul style="list-style-type: none"> ➤ Tablet/capsule Inspection machine is qualified. ➤ Visual Inspectors are trained for sorting of tablets/Capsule. ➤ Medical Examination also 	Qualification Protocol	4	1	3	12	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
				<ul style="list-style-type: none"> ➤ Status label put on each container "Ready for packing". ➤ Unauthorized entry in quarantine area. ➤ Light intensity is not suitable for the activity. ➤ Inspection activity is performed by untrained personnel. ➤ Procedure not available for process of inspection checks during tablet packing 	<ul style="list-style-type: none"> performed for inspectors. ➤ Status label put on each container "Ready for packing". Lid of container closed and properly tight with cable tie ➤ All drums are placed pallets wise affix status label "Ready for packing" ➤ Only of authorized persons access is there in inspection area ➤ Light intensity is suitable for the activity. ➤ Inspection activity is performed by trained personnel. ➤ Procedure available for process of inspection checks during tablet packing 										
		Probability of storage of sorted tablets in unclean container	Chance of Contamination	<ul style="list-style-type: none"> ➤ If Clean Container not available for storage of inspected tablets. ➤ Procedure not available for Cleaning of Container. 	<ul style="list-style-type: none"> ➤ Dedicated Container provided for storage of inspected tablets. ➤ Cleaning procedure is available & cleaning log also available for Cleaning of Container. 		4	1	3	12	NA	NA	NA	NA	NA
7.	Labeling	Mixing of packing	Products mix up.	<ul style="list-style-type: none"> ➤ Two different product of packing material 	<ul style="list-style-type: none"> ➤ Only one product packing material kept in Day Store at 		4	1	3	12	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
		material in secondary packing area		<ul style="list-style-type: none"> placed in same area /Line. ➤ Procedure is not available for verification of packing material after dispensing or packing material keeping in Staging area. ➤ Status labeling not in practice. ➤ Separate area not provided. ➤ Material not stored properly. ➤ Activity is performed by untrained personnel. 	<ul style="list-style-type: none"> a time. ➤ One product & one batch taken at a time in packing area ➤ Procedure is available for verification of packing material after dispensing or packing material keeping in Staging area. ➤ Status labeling is in place. ➤ Dedicated Day store is provided for storage of Material line wise. ➤ Unidirectional flow is provided for the material movement. ➤ In case of use of extra material, Packaging Material taken in cubical only after verification from QA. ➤ All packing activity is performed by trained personnel. 										
		Probability of mix up of stereos during product change over	Process failure and market complaint and direct impact on patient	<ul style="list-style-type: none"> ➤ If handling of stereos not proper. ➤ Written Procedure not available. ➤ Personnel handling stereo not trained. 	<ul style="list-style-type: none"> ➤ SOP for handling of Stereo is available & followed. ➤ One product issuance procedure is in practice. ➤ All stereo is handled by trained personnel. 		4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
	Labeling		health	<ul style="list-style-type: none"> ➤ Lock & key system not available for keeping stereos. ➤ Procedure of Destruction of stereos not available. 	<ul style="list-style-type: none"> ➤ Destruction activity is performed by trained personnel in presence of QA Person. ➤ Lock & Key arrangement is available for storage of Stereo. ➤ Destruction of stereos after completion of batch done by QA persons only. 										
		Probability of Wrong Proof Sign	Market Complaint & Product identification failure	<ul style="list-style-type: none"> ➤ Coding style and price not as per provided list. ➤ Price list updated version not present in packing hall area or its designated place. ➤ Finished product price list not available in packing hall. ➤ SOP for finished product prices list is not available & followed. ➤ Line clearance procedure not followed. 	<ul style="list-style-type: none"> ➤ Pre-Printed matter / specimen verified as per maintained coding style and price list as provided. ➤ Verification of specimen from QA after product check. ➤ Proof of coding matter is signed after complete verification from BMR & price List. ➤ Update price list is issued by QA after retrieval of supersede version ➤ In process checks also performed initially & at defined interval. ➤ Line clearance is followed before start of the activity. 		4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
					➤ Procedure is available for Line clearance & followed properly.										
	Labeling	Probability of Packing of unprinted strips/carton with un-Coded strips / Carton	Market Complaint & improper identification	<ul style="list-style-type: none"> ➤ If inspection is not performed. ➤ Activity is performed by untrained personnel. ➤ In-process checks not performed at defined intervals. ➤ Challenge test in case of blister machine is not performed at defined frequency. 	<ul style="list-style-type: none"> ➤ 100% inspection of printed packing strips/carton is performed. ➤ All packing activity is performed by trained personnel. ➤ In-process checks performed at defined intervals by Production & Quality Assurance Personnel. ➤ Challenge test of blister machine is part of SOP. 	Batch Manufacturing Record	4	1	4	16	NA	NA	NA	NA	NA
	Labeling	Variation in Quantity during Packing Operation	Market Complaint	<ul style="list-style-type: none"> ➤ Inspection is not performed. ➤ Activity is performed by untrained personnel. ➤ Camera Challenge test is not performed ➤ Weighing Process is not performed. ➤ Balance Verification / Calibration is not performed ➤ Procedure is not available for Weighing of Shipper 	<ul style="list-style-type: none"> ➤ 100% Visual inspection is performed. ➤ Packing activity is performed by trained personnel. ➤ Camera Challenge test is performed. ➤ All packed shipper are checked for weight in BPR ➤ Balance Verification / Calibration activity is performed on defined frequency. ➤ Procedure is available for 	BPR	4	1	2	8	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

S. No.	Item / Function	Potential Failure Mode	Potential Effect of Failure (Effect)	Potential Cause/ Mechanism of Failure	Current Control	Reference	Risk with Current control Measure				Recommended Actions (if any)	Risk after control measure			RPN (S*O*D)
							S	O	D	Risk Priority Number (S*O*D)		S	O	D	
					Weighing of Shipper										
8.	Batch release	In-complete analytical records and QA release documentation	System failure/ Market Complaint	<ul style="list-style-type: none"> ➤ No SOP for review of analytical records ➤ No SOP for batch release 	<ul style="list-style-type: none"> ➤ SOP for review of analytical records ➤ SOP for review batch release 		4	1	4	16	NA	NA	NA	NA	NA
9.	Storage & dispatch of Finished Goods	Probability of improper Storage of Finished Goods	Product Failure	<ul style="list-style-type: none"> ➤ Space is not provided for storage of Finished Goods. ➤ Temperature Monitoring is not performed. ➤ Racking System is not provided for proper storage of material with proper status labeling. ➤ Procedure is not available of transfer of Finished Goods to FG Store 	<ul style="list-style-type: none"> ➤ Dedicated Finished Goods Storage Area is provided. ➤ Temperature Monitoring is performed on regular basis. ➤ Racking System is provided for proper storage of material with proper status labeling. ➤ Procedure is available & followed of transfer of Finished Goods to Finished Goods Store. 		4	1	3	12	NA	NA	NA	NA	NA
10.	Transfer of scrap	Probability of contamination	Contamination & cross contamination	<ul style="list-style-type: none"> ➤ Procedure is not available of handling and transfers of scrap ➤ Procedure is not available for Operation and Cleaning of scrap transfer Pass Box 	<ul style="list-style-type: none"> ➤ Procedure is available & followed for handling and transfers of scrap ➤ Procedure is available & followed for Operation and Cleaning of scrap transfer Pass Box 		4	1	4	16	NA	NA	NA	NA	NA



PHARMA DEVILS

QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

Where: S=Severity; O=Occurrence Probability; D=Detection

Remarks (if any):

Quality Risk Management Team			Reviewed By Head Operations Sign & Date	Approved By Head QA Sign & Date
Name	Department	Sign & Date		



PHARMA DEVILS
QUALITY ASSURANCE DEPARTMENT

RISK ASSESSMENT FOR MANUFACTURING (ORAL DOSAGE)

QUALITY RISK ASSESSEMENT AND MITIGATION SUMMARY REPORT

Name of Facility / Equipment / Utility / System / Activity / Procedure / Unit Operation:	
---	--

S. No.	Recommended Action	Responsible Person	Target Date of Completion

Verification of Action Plan:

All the above agreed actions completed, Not Completed.

(*incase any recommendations Not completed, to be tracked through CAPA System)

Remarks (if any):

Verified By
QA
Sign & Date

Approved By
Head QA
Sign & Date