## Technical Specification of Operation Theatre Positioning Devices Closed Head Ring Neonatal Green No Film

	Generic / Technical Specifications	Compliance Statement(s)
Name of Item	Closed Head Ring Neonatal, Green, No Film	Closed Head Ring Neonatal, Green, No Film
Technology/ Product Specificati	ons	
Product Category	As mentioned in catalogue or website: otcare.co.in	Closed Head Ring(s)
Purpose of Product	As defined in catalogue	<ul> <li>Supports patient's head with complete coverage to back of head during prolonged surgeries</li> <li>Protect skull, neck and ears in various positions by complete pressure redistribution</li> </ul>
Product Design (with markings)	Product Image with marking of dimensions	Outer Diameter (Y) Outer Diameter (X) Thickness (Z)
Material	Medical Grade cured gel which doesn't flow out	Yes
Type of Gel Technology	Viscoelastic Gel with Covid Coat+ (Anti-microbial coating) or C3I Gel	C3I Gel
Generic Technology Name Brand Name or OEM	C3I Gel (CC+) or C3I Gel Whether the item is required with/ without Brand Name i.e. OEM	C3I Gel Without Brand Name: OEM or optional as per buyer
Color of Product	Sapphire Blue/ Emerald Green/Custom Color	Green Emerald
Type of Construction	Film/ No Film (single continuous phase)	No Film (Single Continuous Phase)
Specifications of Item /Variant		
Item Code Size of Item, Number of Items Per Pack	As per listed SKU Code Neonatal/ Small/ Medium/ Adolescent/ Large/ Adult/ Extra	EGR-NF-CHR - N Neonatal (N), Piece Per Pack
Dimensions of Item	Large/ Standard Size As mentioned in catalogue specific to item with definition of each annotation used.	X <sup>*</sup> Y <sup>*</sup> Z (in mm) = 90 X 45 X 20 mm Wherein X = Outer Diameter; Y = Inner Diameter and Z = Thickness

**F** 

Dimensional marking of item	Grey Image of Product Item with specific marking of each dimension	Neonatal Unner Diameter (Y) = 45 mm Outer Diameter (X) = 90 mm Thickness (2) = 20 mm	
Dimension of Pack (Wooden: Cardboard Box)	Dimension of Wooden: Cardboard Box (Length X Breadth X Height) from exterior side (in cms)	Box Number 13: 11 X 11.6 X 3.2 cms	
Dimensional Marking of Pack (Wooden: Cardboard Box)	Marking of Exterior Length, Breadth and Height of Wooden: Cardboard Box (in cms)	Length (L) = 11 cm Height (H) = 3.2 cm	
Net weight of Item	Weight of item (in grams) without any accessories or packing	71 grams	
Gross Weight (Item with Wooden: Cardboard Box)	Gross weight inclusive of item, its accessories and Wooden: Cardboard box used for packing (in grams)	177 grams	
Specification (with optional cho			
Pandemic Resilience Ability: Prevent Spread of Infection	Specialized Gel Technological Variant with Covid Coat+ (sustainable solution that is tested against hospital pathogens responsible for Hospital Associated Infections)	No	
Packaging: Internal Environment	Option 1: Viscoelastic Gel with		

assurance and accessories inside pack	Covid Coat+ (with/ without) film based item should have anti- microbial sticker, air clean pouch and 50 ml of Covid Coat+ solution. <b>Option 2</b> : C3I Gel (with/ without film) doesn't contain any accessory items	No accessory items are provided in the box.
Compliance Statement with AST SOPS (Digital Access) (Optional)	<b>Option 1:</b> Compliance Statement (Generic)/ Specific to Product should be provided in physical or digital format ensuring patient safety as per laid down Guidelines by Association of Surgical Technologist(s) SOPs for Positioning Devices	No such access of such information provided in the pack.
	Option 2: No such access of information provided with pack	
Barcodes (optional)	Option 1: Bar codes specifying item information should be available outside box. Option 2: No Barcode is provided on the pack.	No barcode specifying company information is provided on the box.
Acceptance Test Procedures Compliance (optional)	Option 1: User Manual provides description of ATPs which minimally suffice testing parameters to establish (a) environmental friendly material; (b) elastomerism; (c) hydrophobicity; (d) cold tolerance; (e) impact resistance and; (f) destructive testing, thereby ensuring the nature of gel technology to support the requirements of operation theatre positioning device Option 2: User Manual is not provided with testing Kit	User Manual is not provided with Testing Kit in this pack.
User/ Technical / Maintenance manuals to be supplied in English & Hindi in hard and soft Copy	<b>Option 1:</b> Bilingual (in physical and digital copy) User Manual with third optional language (digital access) as per specific provision of order only (if provided) should be available. <b>Option 2:</b> No User Manual is provided with Packaging Kit.	No User Manual is provided with Packaging Kit.



## Manufacturing Certifications and Product Standards Operation Theatre Positioning Devices

	Generic / Technical Specifications	Compliance Statement(s)
Product Standard Certification	CE or any other standard (if applicable) Certification Number,	CE Certification Number: CE-97801
	Date	Date: 09-04-2021 to 08-04-2024
Manufacturer's Quality	ISO 9001: 2015 and ISO 13485:	ISO 9001: 2015
Standard	2016 as well as any other	Cert No : 305021041024Q
	standard with its number and date	Date: 10-04-2021
		ISO 13485: 2016
		Cert No: MD-9014121
		Date: 09-04-2021
Certification regarding	REACH standard assuring Gel	REACH
chemical inertness	free from any hazardous	Cert No: CH:TX: 1142028342
	/environment degrading constituents	Date: 29-09-2020
	Cert Number & Date	
GMP Certification	Standards for Global	WHO: GMP
	Manufacturing Practices- Best	Cert No: UQ-901241
	Practices adopted for	Date: 09-03-2021 to 08-03-2024
	development of medical devices	
	i.e. WHO: GMP	
	Cert No and Date	
QCI Certification	Certification issued by Quality	QCI
	Council of India (QCI) for	Cert No: VA-452406728758919
	adoption of best quality practices	Date: 27-7-2021 to 26-07-2024
	in development, occupational hygiene, management, safety	
	and other aspects.	

## Technical Specifications: Material, Technology, Packaging, Purchase & Site Utilities Operation Theatre Positioning Devices

	Generic / Technical Specifications	Compliance Statement(s)
Category	Health Care Device/ Non-Health Care Utility Device/ Both	Health Care Device
Toxin Free Composition	Material to be Latex free	Latex, Plasticizer, Phalates, Silicone and
	Material to be Phalates free	Polyurethane Free Gel.
	Material to be Polyurethane Free	
	Plasticizer & silicone free Gel	
Human Safe	Material to be non toxic, Skin	Compatible with skin even during long
	compatible and inert	duration usage while in direct contact with
		skin during surgeries
Eco-friendly and	Material shall be eco-friendly and	Gel material is REACH certified, thus
Recyclable	recyclable	environment friendly as well can be recycled.
Elasticity of Material	Item is designed to evenly distribute	Elastomeric Cushioning Gel complies with
(Elastomeric Cushioning)	the body pressure to prevent	minimum requirement of Elongation strain
	circulatory disturbance and pressure	withstands ability ( $\geq$ 500%) while
	ulcer at the bony prominences	simultaneously Shore A value limits to Zero.
Elongation Strain Ability	Elastomeric Ability is estimated as	543%
(%)	elongation strain withstands ability	
	with minimum of 500%.	
Soft Cushioning	Material having Shore A value limits	Item's material has Shore A value limits to
	to zero	Zero indicating its extreme softness
		preventing pressure sore
Conforming Ability	Device should be able to complement	Complete: Designed according to body
(Complete/ Partial)	body's contours completely	contours to prevent intra operative skin
		injuries and to avoid respiratory or nerve
		injuries
Non-Leaky	Material should not flow on prick	Elastomeric Gel is closed cell structure that
		doesn't leak out when pricked or punctured.
Density	0.3 to 0.9 g/cc	Density of material used in development of
	"Optimal value attributes towards	item has density of 0.8 g/cc (4.9 lb/foot).
	strength of Positioning Device to hold	
	body weight while not losing	
	flexibility"	
Compression Set in	Should be least so that it does not get	3.3

Material (%)	compressed with time.	
Repeated Usage : Bottom Out Resistance Ability	Device should be reusable and should not bottom out on repeat usage	Organic, inert & reusable which don't bottom out on repeated usage due to high density with least compression set.
Weight bearing capacity of the gel pad/ device (in Kg)	≥200 Kg	Item is able to hold 200 Kg of patient's weight at vertical angle of placement.
Rebounding Capacity	Device should not be immersive and rebound in less than 1 second	Item has high rebounding capacity, on withdrawal of external pressure, in less than fraction of second it rebounds, thereby, preventing pressure due to any bony prominence.
Intrinsic Impact Resistant Ability	Impact Resistant ability is linked to its tensile strength with optimal core value of 10 Kg/ cm <sup>3</sup> .	Gel material used in development of item complies with requirement of optimal core value of Tensile strength of 10 Kg/ cm <sup>3</sup> .
Tensile Strength of the technology (Kg/ cm <sup>3</sup> )	Optimal core value of 10 Kg/cm <sup>3</sup>	11.4 Kg/ cm <sup>3</sup>
Crush Strength	No permanent deformation even after n = 1000 crushing cycles at 1600 psi.	Yes, material complies with such requirement for Crush Strength.
Uniform Pressure Distribution	Complete / Partial	Complete pressure re-distribution realized as tear strength ranges from 1.0 -4.5 kN/m and also reduces capillary interface pressure thereby preventing bed sores, pressure, shear and frictional impact during prolonged surgeries
Tear Strength (kN/m)	Should be in range of 1-4.5 kN/m	4.17
Capillary Interface Pressure Reduction Ability	Able to reduce capillary interface pressure to 32 mm Hg or less	Yes, it complied with this requirement.
X- Ray Observation Compatibility	Device should be translucent to X- ray.	Item is translucent to X-ray
Non-Conductive Material	Device should be non-conductive	Item is non-conductive, an essential property for its utility in magnetic environment as well as doesn't produce static charge.
C ARM / MRI Compatible	Device should be compatible for usage in C Arm and MRI	Item is compatible for usage in C ARM and MRI sections of hospital due to its non- conductivity.
Range of the usage temperature(in <sup>o</sup> Celsius)	12-40°C	Item is maximally effective in this ambient range of 12-40°C.

	freeze or crack under standard	withstand up to 30°C with no areaks	
	operating conditions and withstand	withstand up to -30°C with no cracks.	
	upto -30°C during storage / transit		
Non-supportive to microbial growth	Hypoallergenic/ non-toxic & doesn't support any microbial growth	Gel material by its intrinsic composition doesn't support any microbial growth.	L
Anti-Microbial Coating	Standard anti-microbial coating is required as per Infection Control Guidelines of Hospital.	Item is coated with anti-microbial coating to prevent growth of opportunistic pathogens	
Washability	Positioning Device can easily be cleaned using standard operating room/ hospital based detergents.	Easily cleaned using Standard Hospital Detergents, instruction manual is provided in every pack as well as available digitally with QR code on each pack.	
Hot Operation Theatre Compatible	Positioning Device that can be used directly with partially contaminated victim of Chemical and Radiological Emergency for Emergency Surgeries in Hot OTs	Compatible for decontamination procedures to remove C& R agents being hydrophobic with closed cell structure (moisture resistant)	
Hydrophobic	The material should be Hydrophobic	Material dose not absorb any water, chemical or fragrance etc	
Leakage proof	The material should be leakage proof	Material, being closed cell structure, is leakage proof & moisture resistant	
Unusual Movement Resistance of OT Table: Adhesion of Material	Velcro to be provided for adhesion.	Device is provided with Stick on Surface that can be attached to Velcro to affix device on OT Table preventing unwanted movement of device during Prolonged Surgeries.	
	Packaging Mater	ial	
Complimentarily of Pack Size, Material, Strength with Item	Suitable packing to withstand transit and accommodate the size of device to be provided	Wooden Box complement to weight of item with size dimensions for ease of fitting with least possible movement during transit	
The type of the inner wall of the packing box	The inner walls are laminated coating to prevent any direct contact with absorbent material or if lamination is restricted in region specific regulation on plastic, butter paper is used.	Inner walls of Wooden Box are laminated to prevent any direct contact with absorbent material or otherwise product is wrapped in butter paper if region specific restrictions don't allow use of laminated sheets.	
Ultraswachh Disinfection /Sterilization or Gamma Irradiation Sterilization Compatible	Boxes can be sterilized using DRDO's Ultraswachh Sterilization Unit(s) as well as Gamma Irradiation for safety of packaged material for direct utility in OT facility	Gel Technology is compatible for both DRDO's Ultraswachh Sterilization Procedures as well as Gamma Irradiation. User can decide as per available hospital infrastructure.	
	Purchase Informa	tion	
Warranty in years(For manufacturing defects)	01 year of comprehensive warranty applicable from Date of Delivery for	Company provides 01 year of comprehensive warranty applicable from	

	any manufacturing defects.	Date of Delivery for any manufacturing
		Defects as per T&C applied in
		Manufacturing Warranty Agreement, digitally
		accessible from Signage Information Sticker
		(if available as per option selected).
Shelf Life (in years)	Shelf life of item provided should be	Shelf Life of item provided in the lot is $\geq 5$
	minimum of 5 years or more.	years applicable from date of manufacturing.
Residual Shelf Life (in	Remaining Shelf Life at the time of	As per date of manufacturing, the remaining
years) – Not Less than 34	Supply should be 3/4 th	shelf life of provided item is $\geq 3/4^{\text{th}}$ of
of Shelf Life		applicable Shelf Life of 5 years from Date of
		Manufacturing.
Certifications & Reports	Copies of reports and certifications to	All information i.e. certification/ relevant
	be furnished to buyer on demand	documentation (reports) in terms of digital
		copy accessible via QR codes labeled on
		packs. Specific confidential certifications are
		provided in physical copies as per requirement furnished by Buyer. It includes
		GST Certification, MSME Registration with
		UAN, Vendor Registration with Government
		Agency (if any), Trademark Registration/
		Application (as applicable, if any) and other
		Company specific documentation requisite
		for legalized production of items.
Web Authentication of	Bath Certification for Supplied Lot	QR Code with digital access to 'batch
Material Batch	should be available online for web	certificate' for particular lot Quality Assurance
	based authentication by Buyer.	is available outside Item's Pack.
	Sites of Application Info	rmation
Applications (Health	Operation Theatres, Intensive Care	Item can be deployed in Operation Theatres,
Purposes)	Units, X-ray, MRI, Special Wards for	ICUs, X-ray diagnostics, MRI, Eye Clinics,
	Comatose/ Semi-Comatose Patients,	Special Wards for both comatose, semi-
	Rehabilitation Centres for Elderly,	comatose and regular patients, rehabilitation
	Residential Usage for Bed Ridden for	centres for elderly, special children and
	Comatose, Semi-Comatose / Non-	persons suffering from specific problems,
	Comatose Patients.	effectively useful in household for all types of
		bed-riddent, morbid patients including
		comatose and sem-comatose patients. In
		addition, health parlors with massages and
		physiotherapy clinics as well as reception of
		emergency trauma centers, based on
		functionality of item, it can be used.