

**PRODUCT: SHELBLAST WITH PEAK HAVING RATCHET
TYPE ADJUSTMENT**

REF. No. : PN 542



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CONFORMING TO IS: 2925:1984
& EN 397: 2012

TECHNICAL DATA SHEET

SL. No.	CLAUSE	DESCRIPTION	PARAMETERS	SPECIFICATION
1	PHYSICAL PARAMETERS	GENERAL	PROTECTION	<ul style="list-style-type: none"> Has Protective peak with Reinforced Ribs profile for better Impact Resistance Has increased Vertical Clearance along with the crown-cooling vents for increased air flow. Ideal for Hot working atmosphere. The Anchoring Points of the cradle are extra thick to ensure that there is no failure of the cradle in case of an impact. The walls of the Anchoring Points in the Shell where the cradle is anchored are extra thick to prevent any damages and slip out of the anchor points upon an Impact.
			MATERIAL	Made of High Density Polyethylene
			SHOCK ABSORPTION	The function of a Safety Helmet is not only to provide protection to the user's Head from a falling object but its capacity to reduce the impact, which is defined as Shock Absorption Capacity.
			DESIGN, WEARER COMFORT & ERGONOMICS	<ul style="list-style-type: none"> Comes with Ventilated slots which can be opened/closed with the help of a shutter to prevent any rain water seepage. Has a Unique Rain Management system which effectively manages the rain to reduce the follow of water down the neck Forehead comfort pad consists of textile laminated foam sheet to provide extra softness & comfort to the user. The Comfort Pad is Non Skin irritant.



	PHYSICAL PARAMETERS	GENERAL	DESIGN, WEARER COMFORT & ERGONOMICS	<ul style="list-style-type: none"> • The Unique Headband allows good absorption of sweat. • Maintains a neutral pH. Hence does not cause skin irritation • It does not stain the skin through any release of colour • The Eight Point attachment cradle within the Shell has a unique angular placement to provide optimum Shock Absorption. • Shelblast is provided with side slots for fitting Face and Hearing Protection Accessories. • The Comfort Pad used in Headband is made of material which is highly Sweat Absorbent, Cushioned, Dermatologically Tested, Anti-Allergic, Skin Friendly and Anti-Skin Irritant to provide maximum comfort to the user. • Has adjustable Chin Strap. • Consists of Replaceable Chin Strap - Easily Detachable Clamps enables easy replacement of Chin Strap. • Shelblast Chin Strap is provided in two variants- one with Chin Cup for additional comfort & second with Adjustable Slider Buckle. • Has Ratchet Type Adjustment for Comfort & better Grip.
			ADJUSTMENT TYPE	Ratchet- Type adjustment : Ratchet of the Shelblast has a very innovative design consisting of Ratchet Cover, Ratchet Base and Knob for very easy & smooth adjustment of the Headband.
			COLOUR PREFERENCE	Shelblast offers more than 10 colours viz. Super White, Lemon Yellow, Star Blue, Lamination Blue, Red, Mint Green, Hyd. Green, Chrome Orange, Apex Grey & UT Violet.
			HARNESS PREFERENCE	The Helmet Inner Harness is available in options of Webbing and Polymer as per the customer's need.
			WEIGHT	
2	VITAL TEST COMPLIANCE	CLIMATE CONDITION TEST	VERY HOT CLIMATE	Sustains a temperature of 50±5°C for 4 hours in an oven.
			VERY COLD CLIMATE	Sustains a temperature of -10±2°C for 4 hours in a refrigerator.

VITAL TEST COMPLIANCE	SHOCK ABSORPTION TEST	HEAVY RAINFALL	Water flowing all over the surface at a rate of 1Ltr/min for 4 hours.
		As per IS2925:1984	A Rectangular Block having a horizontal striking surface of 180mm x 180mm weighing 3 kgs is allowed to fall freely over the helmet from a height of 1.5 mtr±5mtr. It is ensured that the force transmitted is not greater than 5 kN i.e 510 kgf.
		As per EN397:2012	A Striker, having a mass of 05 kg and a hemispherical striking face of 50 mm ± 1 mm radius, is allowed to fall freely over the helmet from a height of 01Mtr. ± 0.5mm. It is ensured that the force transmitted is not greater than 5KN. "SHELBLAST" complies with both the above specifications completely.
	PENETRATION RESISTANCE TEST	As per IS2925:1984	If a striker of mass 500 gms with a conical steel point having an included angle of 360° and a spherical point radius is dropped on the helmet, mounted on the head form, from a height of 3 mtr, the helmet's shell should not be pierced enough to allow the point to touch the head form, the depth of the penetration should not exceed 10mm. When 'SHELBLAST' was tested as per IS 2925:1984, only a small point mark was obtained on the shell.
		As per EN397:2012	The CE specification EN 397:2012 says that if a Striker of mass 3.0 Kg. with a conical steel point having an included angle of 60°± 0.5° and a spherical point radius of 0.5 mm ± 0.1 mm is dropped on the "SHELTEK", mounted on the Head Form, from a Height of 1000 mm ± 5 mm, the "SHELTEK" Shell should not be pierced enough to allow the point to touch the Head Form. "SHELBLAST" complies with both the above specifications completely.
		As per EN397:2012	When tested as per the procedures mentioned in EN397:2012 the Shell of Safety Helmet is subjected to Flame & the material of Shell shall not burn with the emission of flame after a

	VITAL TEST COMPLIANCE	FLAME RESISTANCE TEST	As per IS2925:1984	<p>period of 05 sec has elapsed after removal of flame.</p> <p>IS 2925:1984 have framed certain specification for flame resistance. A blue flame is generated by a burner with temperature same as that of melting point of copper. This flame is exposed to the surface of the "SHELTEK" at 45° angle for a period of 10 seconds and then the "SHELTEK" is removed. It is ensured that the helmet does not catch fire within 5 seconds of removal of the flame.</p> <p>"SHELBLAST" complies with both the above specifications completely.</p>
		CHIN STRAP ANCHORAGE TEST	As per EN397:2012 As per IS2925:1984	<p>The CE Specification EN397:2012 says that Anchorage Points shall not break at a force of not less 150N and not more than 250N when subjected to tensile load on Safety Helmet mounted on headform.</p> <p>The IS specification says that the Chin Strap of Safety Helmet shall not break when a load of 10kgf is applied for 05 minutes and "SHELBLAST" complies with both the above specifications completely.</p>
		ELECTRICAL INSULATION TEST (OPTIONAL)	As per EN397:2012	<p>When tested as per specifications mentioned in EN397:2012, the Leakage Current shall not exceed 1.2 mA.</p> <p>"SHELBLAST" complies with the above specification completely.</p>
		ELECTRICAL RESISTANCE TEST	As per IS2925:1984	<p>As per IS 2925:1984 standards an inverted helmet is placed into a container containing a solution chloride in water (6 gms/ltr.). The same solution is filled in the inside of the helmet as well. The helmet is allowed to stand for a period of 18-24 hours at room temperature. An A/C voltage of 2000 V is generated between two electrodes, and an ammeter connected in series. It is to be ensured that ammeter shall not show a leakage current in excess of 3 mA.</p> <p>"SHELBLAST" complies with the above specification completely.</p>
		LATERAL DEFORMATION TEST (OPTIONAL)	As per EN397:2012	<p>When tested according to method Prescribed in EN397:2012, The maximum lateral deformation of the helmet shall not exceed 40 mm , and the residual lateral deformation shall not exceed 15 mm.</p>

VITAL TEST COMPLIANCE			“SHELBLAST” complies with the above specification completely.
	VERY LOW TEMPERATURE -20°C or -30°C (OPTIONAL)	As per EN397:2012	When tested as per the method described in EN397:2012, it is ensured that the force transmitted is not greater than 5KN. “SHELBLAST” complies with the above specification completely. When tested as per the method described in EN397:2012, the Safety Helmet’s Shell should not be pierced enough to allow the point of striker to touch the Head Form. “SHELBLAST” complies with the above specification completely.
	HEAT RESISTANCE TEST	As per IS2925:1984	IS 2925:1984 ensures a baseline conformity to heat resistance. The shell is placed in an oven for 15 minutes maintained at a constant temperature of 93±5°C. Upon removal from the oven, the shell should not separate, distort or soften. “SHELBLAST” complies with the above specification completely.
	WATER ABSORPTION TEST	As per IS2925:1984	The IS specification says that the Safety Helmet shall not absorb water more than 5% of its mass when totally dipped into water for 24 hours and “SHELBLAST” complies with the above specification completely.
	LATERAL DEFORMATION TEST (OPTIONAL)	AS PER EN397:2012	When tested according to method Prescribed in EN397:2012, The maximum lateral deformation of the helmet shall not exceed 40 mm, and the residual lateral deformation shall not exceed 15 mm. “SHELBLAST” successfully complies with the requirements of this test.