

OVERVIEW - NEUROBAN *Challenger*

Impact Mitigation Headwear

NEUROBAN *Challenger* Mitigation Headwear is designed to prevent Traumatic Brain Injury resulting from the head colliding with hard surfaces. It will significantly reduce the incidence of Traumatic Brain Injury by providing reliable resistance to kinetic forces impacting the most vulnerable areas of the head being front, rear, sides and cheek bones. This claim is supported by the following attributes being;

BODY MATERIAL - Closed cell Ethylene Vinyl Acetate (EVA). Carefully calculated ratios of component chemicals provide consistent compression characteristics and dependable deceleration of forces.

CHIN STRAP MATERIAL – 16mm Polyester webbing – NBR extending ring.

SAFETY – The body is formed in one piece by the process of plastic injection therefore there are no hard surfaces, joints or gaps to cause injury to the wearer or the opponent.

QUICK CHANGE – The chin strap needs to be adjusted only once utilising hook & loop technology for attachment and adjustment. Once the desired fit has been established it can be removed and replaced within seconds. This feature is made possible by a strong, flexible inline extending ring.

COMFORTABLE – The entire product is seriously light weighing a maximum 100 grams.

COOL TO WEAR – The top of the head is open to allow heat to be ejected. This in turn provides the wearer to remain comfortable in all conditions.

FUNCTIONAL – Documented test results that simulate the impact of a head weighing up to 5.5kg confirm NEUROBAN *Challenger* can collide with a stationary hard incompressible surface at 25kph without reaching FULL compression*

HEARING - is not compromised as there are no impediments.

VISION – Field of View is not compromised by Cheek Protection Extensions.

EARS - Ears are partially protected by the 14mm overhang of the Perimeter Band and Cheek Protection Extensions.

WATER SHEDDING CANALS – on the inside surface are designed to divert sweat and water away from the forehead to the front of the ears via the Cheek Protection Extensions

BOUYANCY – NEUROBAN supports the head when the wearer is immersed which may be a consideration for water sports enthusiasts.

SIZING – NEUROBAN *Challenger* will be available in 15 sizes and is supplied according to each individual's head size. This ensures that every square millimetre of the head gear will provide maximum protection from impact and will not be compromised by open gaps resulting from size adjustment mechanisms.

**For head gear to be effective, the compression characteristics of the product must be greater than that of the force being applied.*

