## RHEDN

## Protective technology behind EOX: RHEON

Developed in accordance with the latest ECE 22.06 safety standard and DOT certification requirements, Ruroc's new EOX helmet sets the standard for next-level safety and rider protection. To achieve this, Ruroc once again partnered with the protective headgear specialists at RHEON<sup>™</sup> for targeted protection against impact and rotational forces - as first seen in the ATLAS 4.0 helmet - offering supreme protection to Ruroc riders.

Developed by a group of scientists, engineers and designers for over 15 years at Imperial College London, RHEON<sup>™</sup> is an innovative, reactive super-polymer that originates from the study of the flow of matter: 'Rheology'. The soft, flexible polymer works to mitigate damaging rotational impact forces by dynamically solidifying upon high-velocity impacts. Unlike a conventional static material, the polymer absorbs energy during the solidifying process, as opposed to redirecting the energy, resulting in significantly less transmitted force to the rider.

Seamlessly integrated into the headlining of the EOX, RHEON<sup>™</sup> polymer is moulded into a hexagonal pattern using a patented computational design technique that allows it to remain thin and flexible when not under force. This not only enhances the comfort of the helmet, but the hexagonal shapes also trap air, minimising movement and controlling vibrations, making the EOX even quieter; all without reducing the protective properties of the technology.

RHEON<sup>™</sup> technology works alongside the EOX's EPS and shell, which work to absorb the forces from blunt impacts. Ruroc introduces its brand-new Quad-Matrix Carbon Composite shell made of T300 carbon fibre reinforced with Kevlar, Nylon and Fibreglass to enhance strength, flexibility and overall impact performance. The result is Ruroc's lightest and most robust carbon composite to date, complemented by a multi-density EPS and EPP impact liner for enhanced energy absorption.

For more information on RHEON<sup>™</sup>, please visit <u>www.rheonlabs.com</u>