



OUR SCIENCE – “REPCON FOR IMPROVED VISIBILITY & FLYING SAFETY”

Since 1973 – with its patented RAIN-X® and REPCON® products – Unelko Corporation has pioneered the treatment of windshields, windows and canopies for *improved visibility & driving, flying and marine safety.*

After exhaustive testing by the U.S. Air Force, Navy, and aircraft manufacturers like Boeing, Cessna, Fairchild, General Dynamics, Grumman, Lockheed, MacDonald, Sikorsky and United, the solvent-extended wipe-on REPCON product was awarded National Stock Number 6850-00-139-5297, Military Specification MIL-W-6882 (AS), FSCM 50159 (P/N REPCON), QPL 006882-3 and Technical Manual T.O. 42D4-1-4, “*Rain Repellent for Application to Windshields – All Aircraft*”, on 2 September 1974.

T.O. 42D4-1-4 states, “*Repcon has been tested and has been found to be non-corrosive to aluminum, magnesium and steel surfaces, and Repcon will not stress craze or crack acrylic or polycarbonate plastic of the type used in aircraft windshields.*” Those performance/safety characteristics remain accurate for Repcon until today!

Over the years, certain automotive, marine and motorcycle manufacturers turned increasingly from glass to windshields made of acrylic (Plexiglas™, Perspex™ and Lucite™) and polycarbonate (Lexan™, Lexan FMR® and others) plastic. Although plastics were less subject to breakage and were more moldable, it was found that some acrylics were more subject to shrinkage and expansion due to temperature changes and polycarbonates were more subject to scratching. Polycarbonates, being favored for motorcycles, were ultimately “hard-coated” with various types of silica to improve their scratch resistance, while maintaining clarity (MR 4000).

As RAIN-X and REPCON were increasingly employed by motorcyclists and small marine vessels for improved visibility and motoring/navigation safety, it was found that the RAIN-X and REPCON products were incompatible with certain “hard-coats” that their manufacturers would not chemically identify or describe.

Absent cooperation from the manufacturers/suppliers of plastic windshields, Unelko took the position of advising users: **DO NOT USE ON TRANSPARENT PLASTICS UNLESS APPROVED BY THE MANUFACTURER OF THE PLASTIC OR PRE-TESTED FOR COMPATIBILITY.**