

Question:

I work in the food industry and use the MSEZ with a nosecone that has a plastic lens since we cannot use glass out in our production area. It seems that the lens scratches easily, is there a harder plastic that we can use?

Answer

The lens material is Polycarbonate (PC), the only alternatives that offer the same light transmission properties are Acrylic and Glass. Typically Acrylic (PMMA, trademarked name is Plexiglas) has the same scratch resistance as PC. Do you think the scratches are occurring because of the lens interaction with the measured product (e.g. the specimen being measured is causing the scratches) or is the scratching occurring because the measured products leaves a residue, film, or some type of substance on the lens and then the cleaning process is causing the scratches?. If the product is causing the scratches then the only alternative is to replace the lens at more frequent intervals. If the cleaning process is causing the scratches then please research microfiber and chamois cloths and only use water or water mixed with a laboratory grade glass/clear plastic detergent to clean the lens.