I would start off by experimenting for known magnetic properties. I would take the standard bar magnet and approach the traxolene with both poles to test for attraction properties. I would expect one pole of the bar magnet to attract the traxolene, and the opposite pole to repel away from it. I would then do the same experiment to the opposite end of the traxolene and expect the results to be inversed. This experiment would test traxolene's known magnetic properties, expecting results consistent with having both a magnetic north and magnetic south pole. Should the traxolene not adhere to expectations, it could either be ferromagnetic or have a new type of magnetic pole.

Next, I would test for ferromagnetic properties, which would be fairly easy. Ferromagnets do not interact with neutral objects, so we could test the traxolene against pieces of iron to see if they are attracted to the magnet. If the pieces are not attracted, then traxolene is merely a ferromagnet. Otherwise, we must have a new type of magnetic pole.