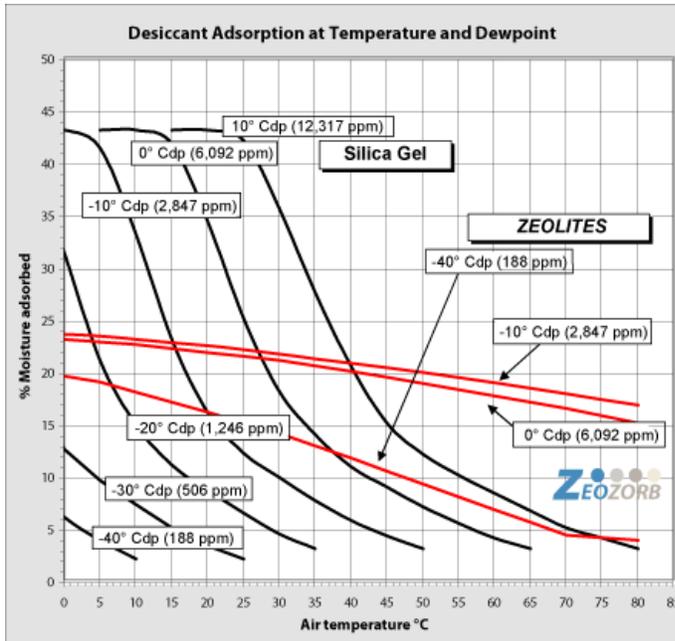


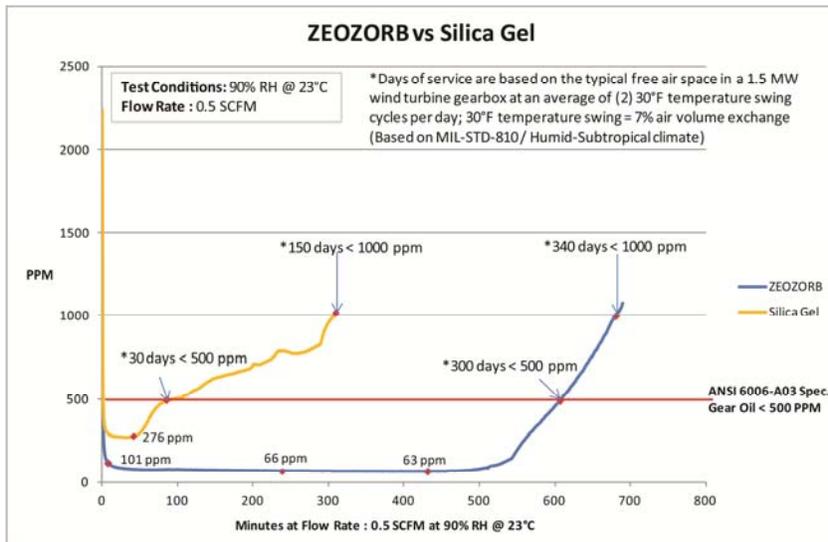


ZEOZORB Breather vs Silica Gel Breather – Quick Fact Sheet

The main differentiator between ZEOZORB breathers and Silica Gel breathers is the desiccant medium being used. Our unique ZEOLITE desiccant has increased adsorption, longer life, and maintains performance in ALL ENVIRONMENTS. All ZEOZORB breathers have a 3 micron absolute filter.



This graph illustrates the thermal efficiency of ZEOLITES, whereas Silica Gels performance drops off drastically as temperatures increase.



This graph illustrates the increase in life of a ZEOLITE breather vs Silica Gel breather. Both breathers were identical for this test except for the desiccant medium, ZEOLITE vs Silica Gel. Silica Gel lasted 30 days before reaching 500 ppmv, ZEOZORB lasted 300 days before reaching 500 ppmv, roughly 10 times the life in this test.

In addition, our previous testing has shown us that if the free air space above the gear oil is kept very dry it will actually liberate water within the gear oil itself. We had the following Karl Fischer Titration testing completed to prove this theory.

1. New OEM oil baseline test – 4 oz specimen container of new OEM oil sent to lab
2. Saturation test, OEM oil – 4 oz specimen was conditioned at 80% RH @ 75°F for 88 hours
3. Desiccant adsorption test, Saturated oil – 4 oz specimen of Test 2 Saturated oil was conditioned in a DRYKEEPER box for 96 hours with ZEOLITE desiccant placed beneath the oil specimen
4. Desiccant adsorption test, New OEM oil – 4 oz specimen of Test 1 New OEM oil was conditioned in a DRYKEEPER box for 96 hours with Drytech desiccant placed beneath the oil specimen

Test 1	Test 2	Test 3	Test 4
329 ppm	1129 ppm	298 ppm	201 ppm

From this data we can conclude that if the gearbox free air space is kept very dry, below 500 ppm, the dry air will actually liberate moisture from the oil. The saturated Test 2 sample went from 1129 ppm down to 298 ppm after being conditioned with ZEOLITE desiccant for a 96 hour period. Even the new OEM Test 1 sample went from 329 ppm, down to 201 ppm after being conditioned with ZEOLITE desiccant for 96 hours.

After analyzing our results we've concluded that molecular sieve desiccants are capable of SIGNIFICANTLY reducing ppm water levels to levels well below the desired, AWEA 6006-A 03 standard of better than 500 ppm. Our test results confirm that saturated gear oil water ppm levels will SIGNIFICANTLY reduce (about 75%) when conditioned with ZEOLITE desiccants, and even non-saturated, new gear oil water ppm levels will reduce as well (about 39%).