WildAgain Wildlife Rehabilitation
Reconstitution Tests – Zoologic 33/40

Findings

Based on the described methodology, two lots of Zoologic® 33/40 were tested, with the results summarized in the inset box at right and more fully displayed below.

Reconstitution efficiency Cluster size < 1,000µm	InterQuartile Mean Resting time		
Product/Water temp.	**Instant**	**8Hr**	**12Hr**
Zoologic 33/40 1139ZE 1369 100F	89.2%	93.6%	91.3%
Zoologic 33/40 1139ZE 1369 160F	93.2%	91.4%	90.2%
Zoologic 33/40 2329ZE 2409 100F	89.2%	92.3%	90.2%
Zoologic 33/40 2329ZE 2409 160F	87.9%	86.3%	83.9%
100F (average all lots)	89%	93%	91%
160F (average all lots)	91%	89%	87%

In summary, the following observations were noted:

Water temperature used for mixing

It appears that sometime during the last 10 years or so Zoologic® 33/40 may have undergone some changes in either its formulation or its manufacturing process - though this is only speculation. Ten years ago, WildAgain's reconstitution tests showed better results using a higher water temperature (160°F) when reconstituting into a final formula. The current round of testing no longer supports those earlier findings and produces mixed results. A better result is achieved, on average, using only a warm water temperature (100°F) for mixing.

Resting time after mixing

The prior round of testing showed best results when the formula was mixed and then allowed some period of time to rest, and not used as an 'instant mix'. The current round of testing no longer supports those earlier findings. Rather, it indicates resting time affects performance differently depending on water temperature used for mixing.

Summary

Based on the test results in these two lots of Zoologic® 33/40, results were mixed. If using warm water (100°F) for mixing, performance was better when allowed to rest 8-12 hours. Conversely, if hotter water (160°F) was used for mixing, performance declined with resting time.


Zoologic® 33/40 Reconstitution Efficiency - (cluster size < 1,000μm)
100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%