

Batch	Agent1	Agent2	t-Test: Paired Two Sample for Means		
1	7,7	8,5			
2	9,2	9,6			
3	6,8	6,4			
4	9,5	9,8			
5	8,7	9,3			
6	6,9	7,6			
7	7,5	8,2			
8	7,1	7,7			
9	8,7	9,4			
10	9,4	8,9			
11	9,4	9,7			
12	8,1	9,1			
				<i>Variable 1</i>	<i>Variable 2</i>
			Mean	8,25	8,683333333
			Variance	1,059090909	1,077878788
			Observations	12	12
			Pearson Correlation	0,901055812	
			Hypothesized Mean Difference	0	
			df	11	
			t Stat	-3,263938591	
			P(T<=t) one-tail	0,003772997	
			t Critical one-tail	1,795884819	
			P(T<=t) two-tail	0,007545995	
			t Critical two-tail	2,20098516	
			Difference in Means	-0,433333333	

Two-Tailed Test to show Impurity differences between 2 Filtration Agents

The sample Mean from Agent 1 and 2 were 8.25 and 8.68 respectively.

Underlying Mean number of Impurities associated with the different Agents, shows that there are less impurities associated with Agent 1, by an estimated $8.25 - 8.68 = 0.43$ than Agent 2.

Agent 1 appears to have less detected impurities by a ratio of 0.43 for each instance.

The obtained related samples $t = 3.264$ with 11 degrees of freedom.

Associated p-value = 0.008, and observed t is significant at the 5% level (two-tailed) for behavioral studies (or 1% or less for medical studies).

These results would support the Null Hypothesis that there is little difference in impurity levels between the 2 Filtration Agents.