cost-of-use analysis for : LAUNDRY DETERGENT

1 WATER USED TO DISPENSE PRODUCT:

U S CHEMICAL	Competitor
2 x 1.5 gal.	16 lb. case
0 gal. used	17.1 gal. used per lb.*

2 WATER USED PER CASE TO DISPENSE PRODUCT:

U S CHEMICAL	Competitor
(A) = 0 gal. per case	(B) = 16 lb. x 17.1 = 273.6 gal.

3 MICROTECH VS. EXCESS GALLONS OF WATER TO DISPENSE SOLID:

(A)	-	(B)	=	Excess
0	-	273.6	=	273.6

4 COST TO HEAT WATER USED IN DISPENSING PRODUCT TO WASH WHEEL:

	8.33	Pounds = Weight of 1 gal. of water
Times	75	Degree rise (60 incoming raised to 135)
Equals	624.75	BTU's required per gallon
Divided	3413	BTU conversion factor to kWh
Equals	0.183050103	kWh
Times	0.21	National average cost per kWh**
Equals	$ 0.0384	Cost per gallon for 60 degree rise
Times	273.6	Excess gallons consumed
Equals	$ 10.51	**(C)** Excess cost for heating transport water

5 COST OF WATER USED TO TRANSPORT DETERGENT:

National average cost for water per 1000 CF (cubic feet) is: $ 15.00
National average cost for sewage per 1000 CF (cubic feet) is: $1.50
Conversion factor for CF to gallons is 0.13368

273.6 x 0.13368 = 36.57
36.57 / 1000 x 3 = cost of transport water
(D) $0.11 = cost of transport water

6 TOTAL ADDITIONAL COST TO DISPENSE A CASE OF SOLID DETERGENT:

Electric	+	Water cost		
(C)		(D)		Total additional cost
$ 10.51	+	$ 0.11	=	$ 10.62

* All examples shown are based upon actual laboratory conditions of constant water pressure and constant water temperatures.
** Actual electric, water and sewage rates vary. Use of the actual rate for each utility in your area to provide an accurate picture of the conditions in a case. Actual costs could be significantly higher…and the savings could be much greater.

U S Chemical

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