

TRU TEMP® 2nd GEN

Drop Count Titration Test Procedure

PREP



2.5ml
Syringe



Plastic
Pipette



50 mL
Erlenmeyer
Flask



1.0 mL Tru
Temp 2nd Gen
bath



15-30 mL
Deionized
water



5-10 drops Tru
Temp Indicator
(Phenolphthalein)



Tru Temp test
Solution
(3N HCl)



STEP 1. Transfer **1.0 mL** of **TRU TEMP 2nd GEN** bath into a 50 mL Erlenmeyer Flask using a 2.5ml syringe. Add 15-30 mL deionized water into the flask to make it easier to swirl. Rinse syringe after use.



STEP 2. Add 5-10 drops of phenolphthalein solution (**TRU TEMP INDICATOR**). Swirl the flask to mix. The solution will turn bright pink.



STEP 3. Using the pipette, add the 3.0 N HCl (**TRU TEMP TEST SOLUTION**) dropwise with constant swirling. Count the number of drops added until the solution turns clear. A 50% Tru Temp bath will use about 33 drops.



STEP 4. Record the number of drops and calculate concentration using the following equation:

$$\% \text{ Tru Temp } 2^{\text{nd}} \text{ Gen} = \# \text{ drops added} \times 1.52$$

STEP 5. Make chemical additions if needed. This chart shows additions for 100% target concentration. Keep a Record of your concentrations and actions required in the table on the backside of this sheet.

Bath Concentration	40-gallon bath	100-gallon of bath
50% and above	None Required	None Required
45%	2 gal of TRU TEMP 2nd GEN	5 gal of TRU TEMP 2nd GEN
40%	4 gal of TRU TEMP 2nd GEN	10 gal of TRU TEMP 2nd GEN

It is a good idea to test the **Tru Temp® 2nd Gen** bath every day when first starting up the process line. After establishing a replenishment routine, the testing can be done every week, as dictated by the workload.

Birchwood Technologies® offers **FREE** bath analysis service to all customers. If you would like us to assist in this way, just send us a 4 oz. sample of the bath. We'll analyze and report the results.

TRU TEMP® 2nd GEN LOG RECORD

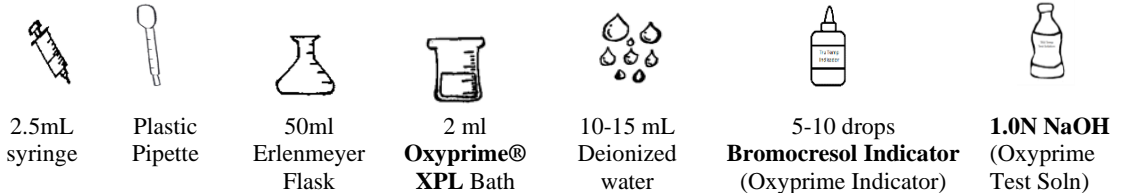
Tank Size _____ Gals (e.g., 40, 100gal)

#	Date	# Drops Tru Temp® Test Solution	% Actual Con. Tru Temp® 2 nd GEN	% Desired Conc. Tru Temp® 2 nd GEN	Actions
e.g.	2/15/2023	34 drops	51.68%	50%	No Action Required
e.g.	2/15/2023	26 Drops	39.52%	50%	Add 4 gallons of Tru Temp 2 nd Gen
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

OXYPRIME[®] XPL

Drop Count Titration Test Procedure

PREP



STEP 1. Using the syringe, transfer 2 mL of **OXYPRIME[®] XPL** bath into a 50 mL Erlenmeyer flask. Add 10-15 ml deionized water into the flask to make it easier to swirl.



STEP 2. Add 5-10 drops of **bromocresol green-methyl red solution** (OXYPRIME INDICATOR). Swirl the flask to mix. The solution will turn orange.



STEP 3. Using the pipette, add **1.0 N NaOH** (OXYPRIME TEST SOLUTION) dropwise with constant swirling. Count the number of drops until the solution turns blue. A 10% Oxyprime bath will use about 22 drops.



STEP 4. Record the number of drops and calculate concentration using the following equation:

$$\% \text{ Oxyprime XPL} = \# \text{ drops added} \times 0.45$$

STEP 5. Make chemical additions if needed. This chart shows additions for 10% target concentration. Keep a Record of your concentrations and actions required in the table on the backside of this sheet.

Bath Concentration	40-gallon bath	100-gallon of bath
10% and above	None Required	None Required
9-7%	1 gallons of OXYPRIME[®] XPL	2 gal of OXYPRIME[®] XPL
6-4%	2 gallons of OXYPRIME[®] XPL	5 gal of OXYPRIME[®] XPL
Less 4%	3 gallons of OXYPRIME[®] XPL	8 gal of OXYPRIME[®] XPL

It is a good idea to test the **OXYPRIME[®] XPL** bath every day when first starting up the process line. After establishing a replenishment routine, the testing can be done every week, as dictated by the workload. Birchwood Technologies[®] offers **FREE** bath analysis service to all customers. If you would like us to assist in this way, just send us a 4 oz. sample of the bath. We'll analyze and report the results.

OXYPRIME® XPL LOG RECORD

Tank Size _____ Gals (e.g., 40, 100gal)

#	Date	# Drops Oxyprime test Solution	% Actual Con. Oxyprime XPL	% Desired Conc. Oxyprime XPL	Actions
e.g.	2/15/2023	30 Drops	13.5%	10%	No Action Required
e.g.	2/15/2023	14 Drops	6.3%	10%	Add 2 gallons of OXYPRIME® XPL
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					