



Commercial Energy Specialists, Inc.

Pool Chemical Dosing Calculator

Prepared for:

Harvest Caye - NCL Cruise Port
Main Facility Pool



CES 5 STAR
WATER QUALITY STANDARD

Dosages calculated using CES commercial-strength chemicals. Using other formulations may not yield similar results.

Gallonge

Treatment and Water Balance Chemicals, Filter Aids

Dosage (lbs)

Chlorine Increase 1 PPM using 10% Sodium Hypochlorite liquid bleach (gallon)	
Chlorine Increase 1 PPM using 65% Calcium Hypochlorite granular or Pulsar Shock	
Calcium Hardness 10 PPM increase using Calcium Carbonate flakes	
Total Alkalinity 10 PPM increase using Sodium Bicarbonate powder	
Total Alkalinity 10 PPM decrease with 20 baume muriatic acid (in gallons) (pour in one spot in deep end of pool)	
Remove 1PPM of chlorine using CES DECHLOR granular	
Shock with Peroxolyte® All-Purpose non-chlorine shock (Moderate soiling >3.0 PPM Chlorine at <725 ORP) **	
Shock with Peroxolyte® All-Purpose non-chlorine shock (Severe soiling <675 ORP with >2.0 PPM Chlorine) **	
Chlorine Demand Shock using CES Tru-Shock™ method with this quantity of Purolyte™ Non-Chlorine Shock	
Tru-Shock™ method also requires that you first add this quantity of Pulsar Super Shock	
Stabilizer 10 PPM increase using Pulsar Sunscreen Powder	
Amount of DE required to Precoat DE grids (Based on 6-Hour turnover rate, double dosage if 3-hour turnover rate)	
Amount of CES-Cellulose required to Precoat grids (Based on 6-Hour turnover rate, double dosage if 3-hour)	

Specialty Chemical

Dosage-(oz) Quarts

Algae

CES "60" Algaecide Initial dose		
CES "60" Algaecide Visible Algae dose		
CES "60" Algaecide Maintenance dose		
CES-Copper-based Algaecide - Visible Algae dose (caution: contains Copper - can lead to staining if mis-applied)		
CES-Copper-based Algaecide - Maintenance dose (caution: contains Copper - can lead to staining if mis-applied)		

Oil, Organics, Scum Line

CES Next Generation Water Science - AAD - Amino Acid Digester - Purge or Initial treatment		
CES Next Generation Water Science - AAD - Amino Acid Digester - Weekly Dose (adjust dose per bather load)		
IS-3 Enzyme - initial dose - use in combination with weekly feed.		
IS-3 Enzyme - Weekly Maintenance dose (using constant feeder or manual feed)		

Phosphate Treatment

CES Next Generation Water Science CPR - Concentrated Phosphate Remover - Removes 1,000 PPB (target: <125 PPB).		
CES Next Generation Water Science CPR - Concentrated Phosphate Remover - Gradual Reduction - repeat as needed.		
PhosFree - Phosphate level 0-300		
PhosFree - Phosphate level 300-600		
PhosFree - Phosphate level 600-900		
PhosFloc - Dosage to remove 1,000 PPB (requires CES assistance / special techniques depending on filter type).		

Metal Prevention

CES Next Generation Water Science - MSI - Metal & Scale Inhibitor - Start Up		
CES Next Generation Water Science - MSI - Metal & Scale Inhibitor - Weekly or Maintenance Dose		
Blue or Magenta Stuff - Initial Dose - Check with CES Rep for best formula for your application.		
Blue or Magenta Stuff - Weekly or Maintenance Dose		

Clarifiers, Polymers

CRS® Dose via CES automated feeder - (1x/wk on 6-Hr Turnover) (2x/wk on 3-5-Hr Turnover) (3x/wk on 1-3-Hr Turnover)		
CRS® Fecal Accident Recovery Dose - fed via automated feeder during (1) turnover period. Follow CRS® instructions.		
UltraBlue - Initial Dose for treating cloudy pools.		
UltraBlue - Weekly or Maintenance Dose.		

** Peroxolyte Shock requires following detailed instructions & using special techniques to avoid staining or releasing of accumulated organics