Patent Pending

Cola®Tex 127

Single Product Solution for Emulsion Polymerization

DESCRIPTION Proprietary Surfactant Blend of Functionalized Alkyl Poly Glucosides
LISTINGS EU (REACH); Canada (NDSL); US (TSCA); Australia (AICS)

Cola®Tex 127 is a predominately naturally-derived blend of functionalized alkyl poly glucosides (APG) and anionic surfactants. Cola®Tex 127 is used in the creation of emulsion polymers.

BENEFITS

- Single product to make acrylic latex formulations for excellent cost/performance
- No EO-1,4 Dioxane or other components of Prop 65 concern
- No Alkyl Phenol Ethoxylate (APE)
- No Sulfates
- Small particle size with low coagulation
- Predominately derived from vegetable sources
- Outstanding human and environmental safety
- Simplifies and speeds the manufacturing process
- Anionic and nonionic compatible
- Easy to handle
- Stable at high and low pH

APPLICATIONS

- Industrial emulsion polymers
- Coatings, adhesives, sealants, elastomers
- Personal care waxes, films, cosmetics

SPECIFICATIONS

Appearance @ 25°C	Clear Amber Liquid
pH (as is) @25°C	7.0 – 8.0
Solids, %	48 – 52
Viscosity @25°C, cP	5000 Max.
CMC, %	0.059

Starter Formulation 1: Acrylic Emulsion Polymer utilizing low levels of **Cola®Tex 127**

	INGREDIENT	Wt. %	Wt. gm
Reactor Charge			
1	Water	22.21	165.00
2	***Cola®Tex 127***	0.03	0.20
3	Sodium Persulfate	0.05	0.37
Pre-emulsion			
1	Water	6.33	47.00
2	***Cola®Tex 127***	1.97	14.60
3	Methyl Methacrylic	23.95	177.95
4	Butyl Acrylate	28.34	210.52
5	Acrylic Acid	2.02	15.00
Initiator			
1	Water	14.81	110.00
2	Sodium Persulfate	0.30	2.25
	TOTAL	100.00	630.64

Starter Formulation 2: Styrene Acrylic Emulsion Polymer utilizing low levels of **Cola®Tex 127**

	INGREDIENT	Wt. %	Wt. gm
Reactor Charge			
1	Water	22.31	165.00
2	***Cola®Tex 127***	0.03	0.20
3	Sodium Persulfate	0.05	0.37
Pre-emulsion			
1	Water	6.36	47.00
2	***Cola®Tex 127***	1.97	14.60
3	Styrene	25.09	185.52
4	Butyl Acrylate	27.44	202.95
5	Acrylic Acid	1.37	10.12
Initiator			
1	Water	14.87	110.00
2	Sodium Persulfate	0.23	1.68
	TOTAL	100.00	739.51

							CaCl2 Stability		
	g/L Coagulum	Solids	Viscosity, cP	Surface Tension	pH	Freeze Thaw Stability	10%	20%	30%
ColaTex 127 Acrylic Emulsion Polymer	0.51	54.85	345	37	7.21	3 Cycles	PASS	PASS	PASS
ColaTex 127 Styrene Acrylic Emulsion Polymer	<0.1	55	980	41.15	6.95	3 Cycles	FAIL	FAIL	FAIL

Starter Formulation Procedures:

1. Charge all ingredients to their respective vessels.
2. Heat to 80 – 85˚C.
3. Begin preemulsion and initiator feeds simultaneously.
4. Feed pre-emulsion over 5 hours and initiator feed over 5.5 hours.
5. Once feeds are complete, hold at 80-85˚C for 30 minutes and cool below 50˚C.
6. Once cool, neutralize to a pH of 7 with ammonium hydroxide.

STORAGE AND HANDLING

Cola®Tex 127 should be stored in closed containers. Shelf life is 12 months from date of manufacture. Cola®Tex 127 is shipped in 55-gallon drums, net weight 450 lbs (204.1 kg). Complete Safety Data Sheet may be downloaded at ***www.colonialchem.com***.

Colonial Chemical

225 Colonial Drive · South Pittsburg, TN 37380
Phone: 423-837-8800 · Fax: 423-837-3888
www.colonialchem.com

Innovative Specialty Surfactants