

# Hand Soaps and Sanitizers

Dennis Abbeduto, Personal Care Business Manager Molly McEnery, Senior Applications Chemist















### WASH YOUR HANDS

#### PREVENT ILLNESS BY WASHING YOUR HANDS!





#### "Fluid Situation" is the Phrase of the Month

- No one knows or even has an estimate of the pandemic "denominator" is
- No one knows when the infection curve will begin trending downward
  - Not all regions will have the same progress of infection
- No one knows when things will return to "normal"
- No one knows what the lasting effect to the global economy will be
- We do know
  - Everyone is suddenly interested in hand and hard surface sanitization
  - Most with new interest have no knowledge of relevant regulations
  - We cannot help people navigate EPA and FDA regulations
  - We are ready to supply surfactants for ALL applications



#### **EPA Links**

- https://www.epa.gov/coronavirus
- <a href="https://www.epa.gov/coronavirus/frequent-questions-about-coronavirus-disease-covid-19">https://www.epa.gov/coronavirus/frequent-questions-about-coronavirus-disease-covid-19</a>
- <a href="https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2">https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2</a>



#### **FDA Links**

- <a href="https://www.fda.gov/drugs/information-drug-class/topical-antiseptic-products-hand-sanitizers-and-antibacterial-soaps">https://www.fda.gov/drugs/information-drug-class/topical-antiseptic-products-hand-sanitizers-and-antibacterial-soaps</a>
- <a href="https://www.fda.gov/drugs/status-otc-rulemakings/rulemaking-history-otc-topical-antimicrobial-drug-products">https://www.fda.gov/drugs/status-otc-rulemakings/rulemaking-history-otc-topical-antimicrobial-drug-products</a>
- <a href="https://www.fda.gov/consumers/consumer-updates/antibacterial-soap-you-can-skip-it-use-plain-soap-and-water">https://www.fda.gov/consumers/consumer-updates/antibacterial-soap-you-can-skip-it-use-plain-soap-and-water</a>



#### What CAN We Offer?

- A LOT!
- We do have plenty of things that will improve feel of foaming alcohol
  - Some even give added benefits!
- ColaLipid C to improve many aspects of alcohol sanitizers
  - Skin conditioning, Detergency, Foam, Mildness, Antimicrobial activity
  - But NOT an FDA or EPA active ingredient
- Poly SugaQuats
  - Also NOT FDA or EPA active ingredients
- Colonial Monolaurin
  - Also NOT an FDA or EPA active ingredient



# Offerings for Antiseptic Washes

- We try to avoid anionic surfactants which may inhibit efficacy of actives
- Not a rule, so many products still include SLES, other anionics
- ColaTeric CBS-HP to improve foam and viscosity of all types of cleansers
- ColaLiquid SCMPA for added viscosity building
- Poly SugaMulse D9 for 100% bio-based fragrance solubilization
- ColaLux LO or ColaLux CAO-35 for foaming and detergency
- ColaLipid C to improve many aspects of antiseptic washes
  - Skin conditioning, Detergency, Foam, Mildness, Antimicrobial activity
  - But NOT an FDA or EPA active ingredient



# Moisturizing Now More than Ever

- All this hand washing and sanitizing is going to have people more worried than ever about how drying and irritating these products can be
- We need to talk to everyone about our refatting and moisturizing additives
- ColaMoist 200
- Poly SugaMulse D9
- ColaMulse 3GO
- ColaMid AME
- ColaQuat SLCC



## Product Safety is Still Paramount

- Interest will be higher than ever in safe, mild products for washing
- · With increased exposure comes increased concern about what goes on skin
- We expect an acceleration of efforts to eliminate "bad guy" ingredients from formulations
  - Sulfates
  - PEGs
  - Synthetic fragrances
  - Petrochemical derivatives
- Will there be a new attitude about product preservation?
  - Longer shelf life
  - Thinking more about microbes



# **PEG-Free Options**

- PEG-free mild surfactants
  - SugaNate
  - Poly SugaPhos
  - ColaTeric Sultaines
  - ColaTeric Amphoacetates (soon ampho-sultaines)
  - Poly SugaMulse
- PEG-free thickening aids
  - ColaLux SAO
  - ColaLiquids
  - ColaTeric HBS

- PEG-free emulsifiers
  - ColaFax CPE
  - ColaFax CPE-K
  - Poly SugaMulse
  - Colonial Monolaurin MB
  - ColaLipid SAFL



### Formulation #2065 Cleanser

| INCI  | Ingredient      | %            |
|---|-----------------|--------------|
| Water   | DI Water        | qs to 100.00 |
| Sodium Laurylglucosides Hydroxypropylsulfonate  | Suga®Nate 160NC | 19.00        |
| Cocamidopropyl Hydroxysultaine                  | Cola®Teric CBS  | 8.00         |
| Disodium Lauryl Sulfosuccinate                  | Cola®Mate LA-40 | 4.00         |
| Cannabis Seedamidopropyl Hydroxysultaine        | Cola®Teric HBS  | 2.00         |
| Hydroxypropyl Bis-Hydroxyethyldimonium Chloride | Cola®Moist 200  | 2.00         |
| Sodium Benzoate and Potassium Sorbate           | Euxyl® K712     | 1.00         |
| Fragrance                                       | Fragrance       | 0.15         |
| Citric Acid                                     | Citric Acid 50% | qs to pH     |

| Property              | Typical               |
|-----------------------|-----------------------|
| Appearance            | Clear, Viscous Liquid |
| рН                    | 5.0 – 5.5             |
| Viscosity @ 25C (LV3) | 4,000 - 6,000 cP      |



## Formulation #1037 Cleanser

| INCI  | Ingredient            | %            |
|---|-----------------------|--------------|
| Water   | DI Water              | qs to 100.00 |
| Sodium Laurylglucosides Hydroxypropylsulfonate  | Suga®Nate 160NC       | 13.00        |
| Lauramidopropyl Hydroxysultaine                 | Cola®Teric LMHS       | 15.00        |
| Disodium Lauryl Sulfosuccinate                  | Cola®Mate LA-40       | 8.00         |
| Hydroxypropyl Bis-Hydroxyethyldimonium Chloride | Cola®Moist 200        | 3.00         |
| Polyquaternium-81                               | Poly Suga®Quat S1210P | 2.00         |
| Sodium Benzoate and Potassium Sorbate           | Euxyl® K712           | 1.00         |
| Fragrance                                       | Fragrance             | 0.20         |
| Citric Acid                                     | Citric Acid 50%       | qs to pH     |

| Property              | Typical               |
|-----------------------|-----------------------|
| Appearance            | Clear, Viscous Liquid |
| рН                    | 5.0 – 5.5             |
| Viscosity @ 25C (LV3) | 5,000 - 10,000 cP     |



# Formulation #4038 Pump Foamer Cleanser

| INCI   | Ingredient                    | %            |
|--|-------------------------------|--------------|
| Water  | DI Water                      | qs to 100.00 |
| Glycerin   | Glycerin                      | 3.00         |
| Lauramine Oxide                                  | Cola®Lux LO                   | 8.00         |
| Cocamidopropyl Hydroxysultaine and Cocamide MIPA | Cola®Liquid SCMPA             | 8.00         |
| Cocamidopropyl PG-Dimonium Chloride Phosphate    | Cola®Lipid C                  | 2.00         |
| Sodium Benzoate and Potassium Sorbate            | Euxyl® K900                   | 0.70         |
| Fragrance  | Fragrance                     | 0.20         |
| Benzalkonium Chloride                            | Stepanquat <sup>™</sup> 50 NF | 0.20         |
| Citric Acid                                      | Citric Acid 50%               | qs to pH     |

| Property              | Typical      |
|-----------------------|--------------|
| Appearance            | Clear Liquid |
| рН                    | 6.0 - 7.0    |
| Viscosity @ 25C (LV3) | < 25 cP      |



### Formulation #3015 Lotion

| INCI                                  | Ingredient           | %            |
|---------------------------------------|----------------------|--------------|
| Water                                 | DI Water             | qs to 100.00 |
| Cetyl Hydroxyethylcellulose           | Natrosol™ Plus 330CS | 0.25         |
| Potassium Hydroxide                   | KOH, 45%             | 0.60         |
| Cetyl Phosphate                       | Cola®Fax CPE         | 1.00         |
| Glycerin                              | Glycerin             | 2.00         |
| Polyglyceryl-3 Oleate                 | Cola®Mulse 3GO       | 0.50         |
| Isopropyl Myristate                   | Isopropyl Myristate  | 6.00         |
| Caprylic/Capric Triglyceride          | Jarchem™ MCT M-5     | 3.00         |
| Vitis Vinifera Seed Oil               | Grapeseed Oil        | 3.00         |
| Coco-Caprylate                        | Cetiol® C 5          | 2.50         |
| Cetyl Alcohol                         | Lanette® 16          | 4.00         |
| Phenoxyethanol and Ethylhexylglycerin | Euxyl® PE 9010       | 0.50         |
| Fragrance                             | Fragrance            | 0.10         |

| Property              | Typical              |
|-----------------------|----------------------|
| Appearance            | Opaque               |
| рН                    | 6.0 - 7.0            |
| Viscosity @ 25C (T-E) | 150,000 - 200,000 cP |



### Formulation #3007 Lotion

| INCI  | Ingredient             | %            |
|---|------------------------|--------------|
| Water                                       | DI Water               | qs to 100.00 |
| Cetyl Hydroxyethylcellulose                 | Natrosol™ Plus 330CS   | 0.50         |
| Sorbitan Oleate Decylglucoside Crosspolymer | Poly Suga®Mulse D6     | 4.00         |
| Glyceryl Laurate                            | Colonial Monolaurin MB | 0.50         |
| Potassium Cetyl Phosphate                   | Cola®Fax CPE-K         | 1.00         |
| Glycerin                                    | Glycerin               | 2.00         |
| Tricaprylin                                 | Dermofeel® MCT         | 3.00         |
| Undecane and Tridecane                      | Cetiol® Ultimate       | 5.00         |
| Argania Spinosa Kernel Oil                  | Argan Oil              | 2.00         |
| Coco-Caprylate                              | Cetiol® C 5            | 2.50         |
| Cetyl Alcohol                               | Lanette® 16            | 4.00         |
| Phenoxyethanol and Ethylhexylglycerin       | Euxyl® PE 9010         | 0.50         |
| Lavandula Angustifolia Oil                  | Lavender 40/42 Oil     | 0.05         |

| Property              | Typical            |
|-----------------------|--------------------|
| Appearance            | Opaque             |
| рН                    | 6.0 - 7.0          |
| Viscosity @ 25C (T-E) | 40,000 - 60,000 cP |



### Formulation #3004 Lotion

| INCI  | Ingredient           | %            |
|---|----------------------|--------------|
| Water   | DI Water             | qs to 100.00 |
| Cetyl Hydroxyethylcellulose                     | Natrosol™ Plus 330CS | 0.40         |
| Potassium Hydroxide                             | KOH, 45%             | 0.40         |
| Cetyl Phosphate                                 | Cola®Fax CPE         | 1.00         |
| Stearamidopropyl PG-Dimonium Chloride Phosphate | Cola®Lipid ST        | 3.00         |
| Hydroxypropyl Bis-Hydroxyethyldimonium Chloride | Cola®Moist 200       | 1.00         |
| Isopropyl Palmitate                             | Hallstar® IPP NF     | 5.00         |
| Coco-Caprylate                                  | Cetiol® C 5          | 1.25         |
| Cocos Nucifera Oil                              | Coconut Oil          | 0.60         |
| Myristyl Myristate                              | Hallstar® MM         | 3.75         |
| Cetyl Alcohol                                   | Lanette® 16          | 2.50         |
| Phenoxyethanol and Ethylhexylglycerin           | Euxyl® PE 9010       | 0.50         |
| Fragrance                                       | Fragrance            | 0.20         |

| Property              | Typical              |
|-----------------------|----------------------|
| Appearance            | Opaque               |
| pH                    | 5.5 – 6.0            |
| Viscosity @ 25C (T-E) | 400,000 - 500,000 cP |



Questions?

Dennis: <u>dennis@colonialchem.com</u>

Molly: molly@colonialchem.com











