

An aerial photograph of a vast tropical ocean. The water transitions from a deep blue at the horizon to a vibrant turquoise near the shore. White, frothy waves are visible breaking across the surface. The sky is a clear, deep blue, dotted with scattered white clouds. The overall scene is serene and expansive.

In the name of lofty unique

MOUTHWASH





PRESENTING BY :

DR. ZAYNAB SADEGHI GHADI

PHARM. D. , PH. D. OF PHARMACEUTICS

ASSISTANT PROFESSOR AT PHARMACY SCHOOL

ALBORZ UNIVERSITY OF MEDICAL SCIENCES

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- ⦿ Introduction
- ⦿ Benefits
- ⦿ Ingredients
- ⦿ Some examples

MOUTHWASH

- ◉ Solutions
- ◉ with or without active agents
- ◉ Mouth, gingiva and teeth

APPLICATION

- ◉ Antibacterial
- ◉ Fluoride
- ◉ Healing (stomatitis)
- ◉ Fresher mouth

ANTIMICROBIAL PROPERTIES

- ◉ Sterile ×
- ◉ Candida albicans
- ◉ Lowering microbial count

APPLICATIONS

- ◉ Cleaning
- ◉ Antimicrobial properties
- ◉ Remove bad breath

ALCOHOL

- ⦿ Ethanol
- ⦿ Preservative
- ⦿ Improve flavor taste

ALCOHOL

- ⦿ Improve solubility (oily ingredients)
- ⦿ Decrease melting point so improve productions stability
- ⦿ 5-25 % usually 10%

FLAVOR

- ⦿ Improve taste
- ⦿ One of the most important factors for consumer
- ⦿ Consumer compliance
- ⦿ A mixture of flavoring agents

TYPES OF FLAVORS

- ◉ Minty
- ◉ Fruity
- ◉ Cinnamon

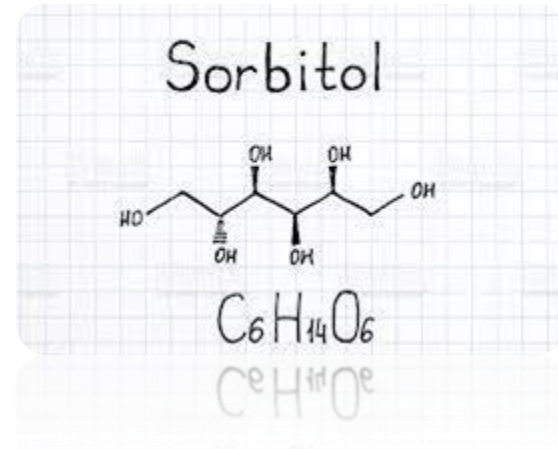
SWEETENER

⦿ Sodium Saccharin



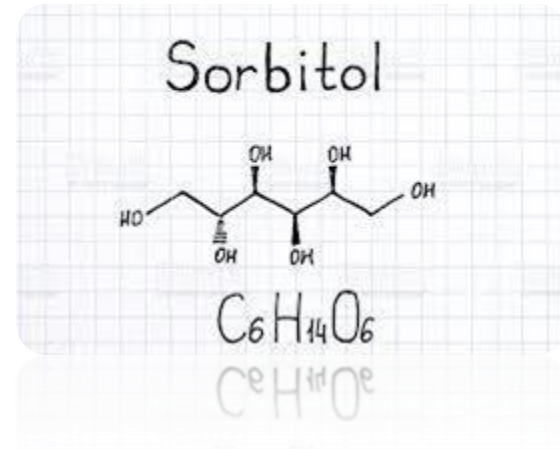
HUMECTANT

- ◉ Sorbitol
- ◉ Glycerin
- ◉ Poly ethylene glycol
- ◉ Propylene glycol



HUMECTANT

- **Viscosity**
- **taste perception**
- **Sweet**
- **5-15 %**



SURFACTANT

- ◉ Produce foam
- ◉ Emulsifies flavoring agents
- ◉ Enhance solubility
- ◉ Up to 1%

TYPES OF SURFACTANTS

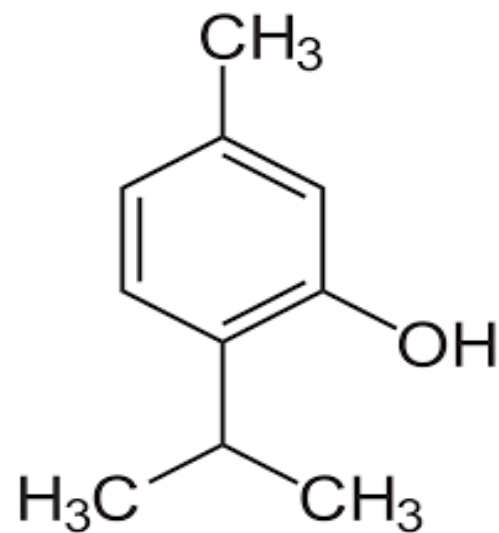
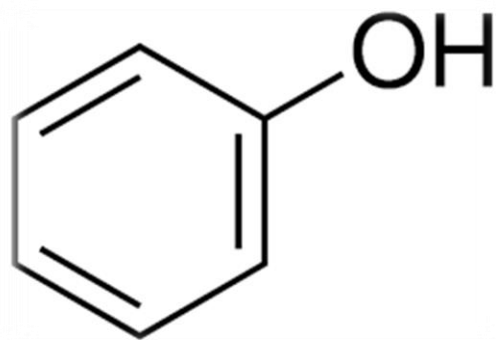
- Tween 80
- Pluronic
- SLS (don't be used usually)



Pluronic F127

ANTIBACTERIAL AGENTS

- Phenol
- Thymol
- Salol
- Tanic acid
- Chlorate thymol
- Hexachlorophene
- Tertiary ammonium



PHENOLIC AGENTS

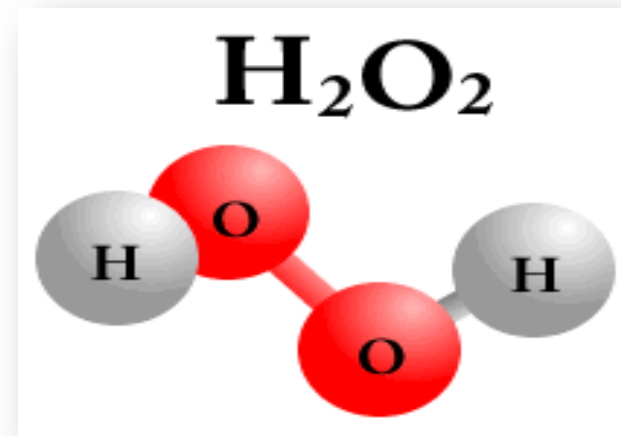
- ◉ Parachlorometacresol
- ◉ Parachlormetaxilenol
- ◉ Low water solubility
- ◉ Co-solvent

THYMOL

- ⦿ Low water solubility
- ⦿ Alcohol
- ⦿ Borax

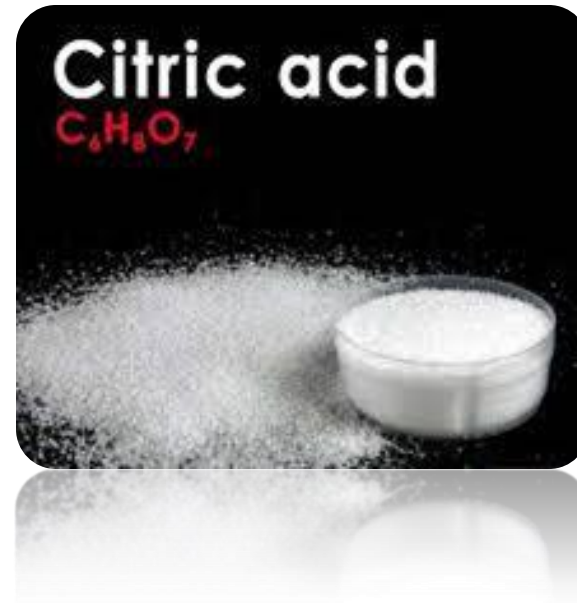
H₂O₂

- ⦿ Not toxic
- ⦿ Clean wound
- ⦿ Not ready to use



CITRIC ACID

- ◉ Cleaning & polishing



TERTIARY AMMONIUM

- ◉ Non toxic
- ◉ Non irritant
- ◉ Anti-plaque

TERTIARY AMMONIUM

- ◉ Benztonium chloride

- ◉ Chlorhexidine

CHLORHEXIDINE MOUTHWASH

- ◉ Anti-plaque
- ◉ Dental decay

DENTAL PLAQUE

- ◉ Calcification (crystallization of minerals) on the surface of the tooth formed mainly in the presence of plaque
- ◉ Rough surface promotes further growth of plaque

DENTAL PLAQUE

- ◉ Stains easily (yellow / brown)
- ◉ Most prevalent near salivary glands and around necks and roots of teeth
- ◉ Removed only by dentist

DENTAL PLAQUE

DENTAL BIOFILM (PLAQUE)

HEALTHY TOOTH

TOOTH WITH DENTAL BIOFILM
(PLAQUE)



DENTAL PLAQUE

HEALTHY TOOTH

TOOTH WITH PLAQUE



PRESERVATIVES

- ⦿ Potassium Sorbate
- ⦿ Parabens
- ⦿ Sodium benzoate

MOUTHWASH FORMULATION EXAMPLE

- Water
- Glycerin
- Propylene Glycol
- Sorbitol
- Poloxamer 407
- Sodium Chloride
- Polysorbate 20
- Cetylpyridium Chloride
- Flavor
- Sodium Saccharin
- Sodium Fluoride
- Potassium Sorbate
- Menthol
- Lonicera Japonica
(Honeysuckle) Flower Extract
- CI 42051, CI 19140, CI 17200

EXAMPLE

⦿ Benzoic acid	1
⦿ Cetyl triethyl ammonium bromide	0.6
⦿ Resorcinol	1
⦿ Thymol	0.15
⦿ Methyl salicylate	0.15
⦿ Menthol	0.15
⦿ Alcohol	22
⦿ Water	up to 100

ANTI-CARIES MOUTHWASH

- ◉ Sodium fluoride
- ◉ 0.05 %
- ◉ 2-3 years (20-40%)
- ◉ Toothpaste VS. Mouthwash

ANTI-CARIES MOUTHWASH

• poloxamer	2
• Sodium fluoride	0.05
• Sodium saccharin	0.02
• Sorbitol	7. 5
• Glycerol	7. 5
• Alcohol	5
• Water	up to 100

ANTI-PLAQUE MOUTHWASH

- ◉ Pyrophosphate
- ◉ Other copolymers
- ◉ 3 months
- ◉ 35%

ANTI-PLAQUE MOUTHWASH

◉ poloxamer	2
◉ Sodium fluoride	0.05
◉ Sodium saccharin	0.02
◉ Gantrez	1
◉ TSPP	1.6
◉ Glycerol	10
◉ Ethanol	15
◉ Water	up to 100

HERBAL MOUTHWASH

- ◉ *Salvadora Persica*
- ◉ *Mentha Spicata*
- ◉ *Achillea Millefolium*

HERBAL MOUTHWASH

- ◉ *Salvadora Persica*
- ◉ *Mentha Spicata*
- ◉ *Achillea Millefolium*
- ◉ *Matricaria chamomilla*

ACHILLEA MILLEFOLIUM

- ◉ Anti-inflammatory



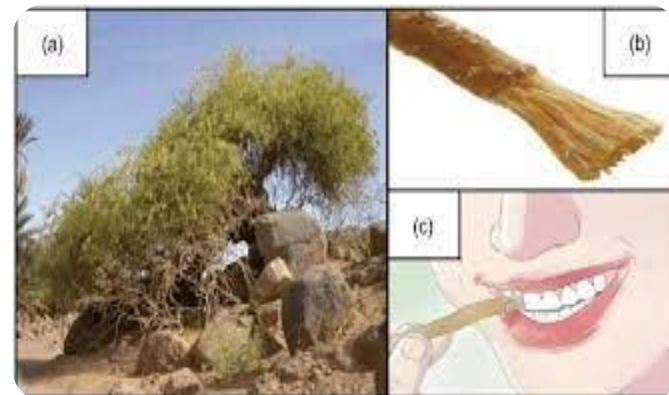
MENTHA SPICATA

- ◉ Antibacterial
- ◉ Antifungal
- ◉ Antioxidant



SALVADORA PERSICA

- ◉ Antiplaque
- ◉ Analgesic
- ◉ Antibacterial
- ◉ Astringent



MATRICARIA CHAMOMILLA

- ◉ Anti inflammatory
- ◉ Antibacterial
- ◉ Anti-allergic
- ◉ Sedative



You can send your question to

Zaynab.sadeghi@yahoo.com

Good luck

