

SRI SARADA COLLEGE FOR WOMEN

(Autonomous)

Reaccredited with "A" Grade by NAAC

Affiliated to Periyar University

Salem - 636 016



HOME PRODUCTS

By

FACULTY OF CHEMISTRY

Dr.R.Thilakam, Associate Professor and Head

Dr.S.Sankari, Associate Professor

Dr.S.Geetha, Associate Professor

Dr.K.Bharathi, Associate Professor

Dr.A.Kalpana, Assistant Professor

Dr.S.Anbuselvi, Assistant Professor

Dr.L.Akilandeswari, Assistant Professor

Dr.E.Akila, Assistant Professor

Dr.V.Janaki, Assistant Professor

Dr.T.Elakkiya, Assistant Professor

Dr.K.Revathy, Assistant Professor

Dr.R.Kavitha, Assistant Professor

HOME PRODUCTS

1. HAND SANITIZER

Hand sanitizer also called hand antiseptic or hand rub is an agent applied to the hands for the purpose of removing common pathogens. Hand sanitizers typically come in gel or liquid form. Their use is recommended when soap and water are not available for hand washing. Although the effectiveness of hand sanitizer is variable, it is employed as a simple means of infection control in a wide variety of settings, from day-care centres and schools to hospitals and health care clinics and from supermarkets to cruise ships.

Chemicals Required:

- Isopropyl Alcohol 99% - 750 mL
- Hydrogen Peroxide 3% - 40 mL
- Glycerol 98% - 10 mL
- Water - 200 mL

Procedure:

- Measure the required quantities of isopropyl alcohol, hydrogen peroxide, and glycerol in suitable containers.
- Transfer isopropyl alcohol and hydrogen peroxide into a suitable container and mix gently.
- Transfer glycerol stepwise and quantitatively into the same container. Mix gently after each addition.



- Rinse the container containing glycerol with water and add the contents to the container.
- Then add 200 ml of water and mix well. Transfer the solution into suitable containers.

Uses:

- Hand sanitizer is recommended for cleaning hands to kill germs.
- The alcohol hand sanitizer is used by health practioners in washing hands during routine patient care- activities.
- It should be used by people in public toilets to prevent contact of diseases.

Precaution:

- Care should be taken while using hand sanitizer because alcohol gel can catch fire. Do not go near flame or gas burner or any burning object during applying hand sanitizer. To minimize the risk of fire, alcohol rub users are instructed to rub their hands until dry.

2. SOAPS

Soaps are basically sodium or potassium salts of higher fatty acids. These are obtained by hydrolysis of fats and oils with sodium or potassium hydroxide.

Chemicals required:

- Caustic soda - 75 g
- Coconut oil - 650 mL
- Water - 200 mL
- Perfume - 5 mL



Procedure:

- Wear all the necessary safety gear like gloves, mask and apron.
- Keep all the material needed on a working table.
- Add 75 g of caustic soda to 200 mL of water in a plastic bowl. Stir thoroughly using a wooden stick until traces of caustic soda totally dissolve.
- Pour the caustic soda solution to 650 mL of coconut oil. Stir slowly and constantly in one direction for about 40 minutes until it thickens or the mixture has the consistency of condensed milk.
- If we want to add some essential oil or perfumes, we can add this little by little while stirring.
- Pour the mixture in molder and place in a temperate and safe place that cannot be reached by children.
- The soap can be used only after 2 to 3 weeks.

Uses:

- Used as a cleansing agent.
- Medicated soaps are used to kill germs from the exposed part of body and wounds.

3. BLEACHING LIQUID

Bleaching agents are chemical products which are used industrially and domestically to clean, and to remove stains. Many bleaches have bactericidal properties, making them useful for disinfecting and sterilizing. "Bleaching powder" usually means a formulation containing calcium hypochlorite.



Chemicals required:

- **Washing soda** - 250 g
- **Hot water** - 1/2 litre
- **Chloride of lime** - 250 g
- **Cold water** - 1 litre

Procedure:

- **Dissolve washing soda in hot water.**
- **Mix Chloride of lime with the cold water, allow it to settle and strain off the clear liquid.**
- **Mix the washing soda solution and the filtrate from the chloride of lime together.**
- **Allow the precipitate that is formed to settle and strain off the clear liquid.**
- **Store it in dark coloured bottles as it is unstable to light.**
- **This liquid called Javelle water is sodium hypochlorite which readily gives off nascent oxygen a powerful bleaching agent.**

Uses:

- **It is used in laundry for bleaching white cottons and linens.**
- **It's used to disinfect surfaces, especially in the kitchen and bathroom.**

4. INK

Ink is a liquid or paste that contains a dye or pigment and is used for writing, drawing or painting. Many inks contain special ingredients to suit them for particular application.



Chemicals required:

- **Crystal violet** - 25 g
- **Glycerin** - 25 g
- **Carbolic acid** - 25 g
- **Water** -1 litre

Procedure:

- **Take one litre of clean warm water in a bowl.**
- **Add crystal violet, glycerin and carbolic acid one by one with constant stirring until the contents dissolve evenly.**
- **Filter the resultant mixture and store in suitable containers.**

Uses:

- **Thicker ink in the paste form is used in letter press and lithographic painting.**
- **Carbon ink is used in dyeing inkjet printers.**
- **Inks are also used in dyeing process**
- **In India electoral ink or indelible ink is used during elections and this ink is applied to the fore finger of voters.**

5. LAUNDRY BLUE

Laundry Blue is used to enhance the whiteness of clothes. White fabric often loses their pleasing whiteness and develop yellow (colour) tint. Blueing is done by only when the fabric is free from soap. This process is followed at the last rinse. It is obtained from chemicals, vegetable and mineral sources.



Chemicals required:

- Acid violet - 10g
- Acid blue - 10g
- Rose tinopal - 10g
- White tinopal - 10g
- Acetic acid - 30g
- Glycerin - 30mL
- Hot water - 1 litre

Procedure:

- Add all the ingredients to a half litre of warm water one by one and stir well to dissolve evenly.
- Then add the remaining half litre water stir well, filter and store in suitable containers.

6. BLACK PHENYL

Black Phenyl is a powerful disinfectant and germicide. Black phenyl is most often used in hotels, hospitals, military facilities, homes, and animal farms. It is the cheapest liquid used for the environmental cleaning.



Chemicals required:

- **Black Rosenum** - 25 g
- **Caustic soda** - 20 g
- **Caustic potash** - 5 g
- **Creasote oil** - 750 mL
- **Water** - 500 mL

Procedure:

- **Dissolve caustic soda and caustic potash in water taken in a plastic bowl.**
- **Take black rosenum in another vessel and heat it in a low flame until it dissolves. Add the creasote oil in portions and mix well.**
- **Pour this into the vessel containing the solution of caustic soda and caustic potash.**
- **Allow the mixture to cool, and then add the desired perfume. This is concentrated solution of phenyl.**
- **Add water to the concentrated phenyl shake well and use.**

Uses:

- **Concentrated solution is used as disinfectant as it kills the disease causing micro-organism.**

7. WHITE PHENYL

White phenyl is a disinfecting agent made from pine oil. It is made by using an emulsifier, a compound that allows an oil to stably make a solution with water.

Chemicals required:

- Oleic acid - 10 mL
- Soap - 50 g
- Pine oil - 100 mL
- Citronella - 2 mL
- Water - 1 litre

Procedure:

- Mix 10 mL of oleic acid with 50 g of soap.
- Add 100 mL of pine oil to the above mixture and stir well.
- Transfer the whole solution into 1 litre of water and add the scent citronella to get pleasant smelling phenyl.

Uses:

- Used as antiseptic and disinfectant.
- White phenyl is used as a cleaning product to remove odors and kill bacteria.
- It is a powerful germ killer and used in hostels, hospitals, offices, bathrooms, toilets, swimming pool and other places of human inhabitation.



8. COMPUTER SAMBRANI

Computer sambrani is an essential item used by all people for religious purpose and it has become a practice to burn sambrani in houses, temples, mosques, churches to spread fragrance and to create a spiritual atmosphere for work ship. The largest consumption of sambrani in India is only for worship.

Chemicals required:

- Carbon powder - 300 g
- Saw dust -300 g
- Sambrani powder -150 g
- Jiggit -25 g
- Yerayera - 25 g
- Kungilium - 150 g
- White oil - 10 mL
- Scent - 5 mL
- Herbal powder - 50 g

Procedure:

- Mix saw dust and sambrani powder thoroughly in a vessel.
- To the above mixture add carbon powder, yerayera, kungilium, Jiggit and herbal powder in white oil.
- Finally add scent for good aroma.
- Mix all the above ingredients thoroughly in the form of paste. Then press the mixture into a mould.
- Remove it from the mould after 2 days.



Uses:

- It is used for worships, ritual purifications, ceremonies, aromatherapy and meditation.
- Used for creating refreshing atmosphere and freshness.
- Spread fragrance for long time that helps in creating holy environment.
- Computer sambrani made from materials such as citronella repel mosquitoes and other insects.

9. INCENSE STICKS

Incense, is aromatic biotic material that releases fragrant smoke when burned. Incense is used for aesthetic reasons, aromatherapy, meditation, and ceremony. Incense is composed of aromatic plant materials, often combined with essential oils. It may also be used as a simple deodorant or insect repellent.

Chemicals required:

- Carbon powder - 1Kg
- Jiggit - 250 g
- Yerayera - 25 g
- Saw dust - 1 Kg
- DEP oil - 10 mL
- Scent - 2 mL
- Thin sticks - 1 Bundle

HAND - HEART - HEAD



Procedure:

- Mix saw dust and carbon powder thoroughly in a tray.
- To the above mixture add jiggit, yerayera in DEP oil and add scent for good aroma to get incense powder.
- Soak bundle of thin sticks in water and dip into the tray of incense powder.
- Finally roll, dry and pack the sticks.

Uses:

- It is used for worships, ritual purifications, ceremonies, aromatherapy and meditation.
- Used for creating refreshing atmosphere and freshness.

10. DETERGENTS

Detergent is a chemical substance, usually in the form of a powder or liquid, with cleansing properties. Detergents mainly consist of sodium alkyl benzene sulphonates.

Chemicals required:

- Washing soda - 1/2 Kg
- Baking soda - 1/2 Kg
- Tinopal - 25 g
- Acid slurry - 150 g
- Blue - 5 g
- Perfume - 5 mL



Procedure:

- Mix washing soda and baking soda with tinopal.
- Add acid slurry to the above mixture and mix it well.
- Finally add blue and perfume and mix it to get uniform colour.
- Dry it and use.

Uses:

- Used as a cleaning agent and mild antiseptic.
- Used for car, house and dress washing.

11. SHAMPOO

Shampoo is a hair care product used for the removal of oils, dirt, skin particles, dandruff, environmental pollutants and other contaminant particles that gradually build in hair.

Chemicals required:

- Sodium lauryl ether sulphate - ½ litre
- EGMS egg white - 100 g
- Coco mono - 100 g
- Coco dye - 100 g
- Water - ½ litre
- Colour - 1 teaspoon
- Perfume - 10 drops



Procedure:

- Boil half a litre of water and add EGMS egg white and mix well.
- Add cocomono and stop heating.
- Mix SLES and coco dye to the above mixture and cool it.
- Then mix colour powder and perfume for good aroma and colour.

DANDRUFF SHAMPOO

Chemicals required:

- Thymol - 0.5 g
- Menthol - 1.0 g
- Camphor - 1.0 g
- Distilled water - 500 mL
- Triethanol amine lauryl sulphate - 500 mL

Procedure:

- Add thymol, menthol, camphor and triethanol amine lauryl sulphate in distilled water and mix it thoroughly to get a shampoo solution.
- Add eucalyptus oil and cade oil for good aroma.

SHAMPOO POWDER

Chemicals required:

- Henna powder - 50 g
- Borax - 150 g
- Sodium carbonate - 250 g
- Potassium carbonate - 50 g
- Soap powder - 500 g

Procedure:

- Mix all the ingredients namely henna powder, borax, sodium carbonate, potassium carbonate and soap powder thoroughly to get shampoo powder.

Uses:

- It is used for removal of dirt, oil, skin particles, dandruff, environment pollutants and other contaminated particles that gradually build upon hair.
- Imports pleasant fragrance to hair.
- Makes hair soft and lustrous.
- Reduces the degree of itching, scaling and inflammation associated with the disease.

12. TALCUM POWDER

The toilet powders comprise of the talcum powder, dusting powder (also termed as body powder or after- bath powder), after-shave powder and baby powder. Of these toilet powders, the most important is talcum powder.

As the name implies, it consist mostly of talc, sometimes mixed with other ingredients. Only the purest grades of talc are used for high grade preparations. Perfume helps to promote the sales of talcum powder. Colour is also of some value, though the white and natural shades sell in largest volume. In some cases, medication, like boric acid or camphor is added. It is noteworthy that the baby powder is usually less heavily perfumed than other toilet powder and without color. Boric acid is a favorite additive not only to the baby powder but to all toilet powders because of its soothing slightly antiseptic properties.



Chemicals Required:

- Talc - 70 g
- Precipitated chalk - 20 g
- Zinc stearate - 3 g
- Boric acid - 5 g
- Perfume - 1 mL

Procedure:

- Add all the ingredients talc, precipitated chalk, zinc stearate, boric acid and mix thoroughly.
- Then add perfume for good aroma.

Uses:

- Talc can soothe dry skin and treat eczema.
- Talc can be used to set the make-up.
- Talc can prevent chafing.



.....

STAY HOME

STAY SAFE