

# Formulation and Evaluation of Herbal Face Toner

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**Abstract:** *There has been increased global interest in Herbal Formulations, herbal remedies are more acceptable in the belief that they are safer with few side effects than the synthetic ones. Herbal face toner does not have any side effects and make face alluring. In herbal face toner main ingredients are, sugar cane juice, pomegranate juice and tomato juice, and other ingredients are mint, lemon juice, rose water. This herbal face toner is in liquid form for applied on skin. Their organoleptic property was evaluated and rheological properties were also evaluated and result is good. The flowing property of face pack is good. The objectives of this herbal toner is rehydrating skin, balancing skin pH, tightening skin pores, relieving irritation, and also germ-free. Herbal face toner is used to stimulate blood circulation, rejuvenates and helps to maintain the elasticity of the skin. The advantage of herbal cosmetics is their non-toxic in nature; reduce the allergic conditions and time-tested usefulness of many ingredients. Thus, in the present work, we found good properties of the face toner.*

**Keywords:** Toner, Sugar cane, Antisepsis, Rehydration

## I. INTRODUCTION

### 1.1 Herbal Cosmetics

The herbal cosmetics are the preparations containing phyto-chemical from a variety of botanical sources, which influences the functions of skin and also provide nutrients necessary for the healthy skin and body. In cosmetic preparation, the natural herbs, products and some extract used for their aromatic value are called as herbal cosmetics. There has been a common belief that the chemical-based cosmetics may be harmful to the skin and turned in increased awareness among consumers for herbal products which triggered the more demand for natural products and their extracts in beauty care products.

### 1.2 Liquid

A liquid is a nearly incompressible fluid that conforms to the shape of its container but retains a constant volume independent of the pressure.

### 1.3 Toner

Toner is a skin care product that's applied to the face and neck after scrubbing. It is used to remove any trace of dirt and dead skin cells after scrubbing. It also helps smooth and get ready the skin for fresh skin care products, such as moisturizers and serums. Glycolic acid is most commonly used because it can be easily synthesized by combining chloroacetic acid with sodium hydroxide followed by re-acidification.

### 1.4 Effect of the Toner on the Skin

Nowadays, the diversity and prevalence of the products cause skin toners to be utilized more as cosmeceuticals products with several purposes; for example, rehydrating skin, balancing skin pH, tightening skin pores, relieving irritation, and also antisepsis.

### Advantages of Toner







- To extra cleansing and Refreshes skin.
- To minimizes appearance of pores.
- To restores skins pH balance.

- To hydrates and Replenishes.
- To refreshes skin.
- To prevent infection and break-down.

**Disadvantages of Toner**

- Toner comes with alcohol make the skin dry and flaky.
- If use in excess, It cause irritation. i.e. redness and swelling.

**II. MATERIALS & METHODS**

Sr. No.	Name of Ingredients	Images	Active Constituents	Uses / purpose
1.	Sugar cane Juice  (Saccharum Officinarum)	 Fig no. : 1 Sugar cane juice	Alpha hydroxyl acid.	Fight acne & ageing & hydrate to skin.
2.	Tomato juice  (Solanum lycopersicum L.)	 Fig no. : 2 Tomato juice	Vit.E, Citric acid, Malic acid.	Replacement of the skin cells. Protect from UV rays & provide redness.
3.	Pomegranate  ( Punica granatum )	 Fig no. : 3 Pomegranate juice	Vit.c, Vit.A, Minerals, Tartaric acid.	Reduce the face mass, Protect from UV rays, Show Astringent property.
4.	Peppermint  ( Mentha piperita L. )	 Fig no. : 4 Mint	Menthol	Astringent, anti-microbial property
5.	Lemon juice  ( Citrus limon )	 Fig no. : 5 Lemon juice	Citric acid	Preservative, anti-microbial property
6.	Rose water  ( Rosa )	 Fig no. : 6 Rose water	Linalool, citronelool	Skin elasticity, anti-wrinkle, anti-oxidant

**Formulation Table**

Sr. No.	Ingredients	Quantity
1.	Sugar cane juice	20%
2.	Pomegranate	10%
3.	Tomato juice	10%
4.	Mint	15%
5.	Lemon juice	10%
6.	Rose water	QS

Table 2. Formulation Table

**Methods of Preparation**

- Collect the juice of ingredients.
- Measure the juice in beaker as per formula.
- Mixed it all in beaker.
- Pour into a spray container.
- Labelled and Used for future research.



Fig.7 Herbal Face Toner

**Container & Storage Condition:**

To be stored at a well-closed spray container at 4°C.

**Direction to use**

- Shake well before used.
- Spray some toner on your clean face or hands.
- Wipe out the spray with cotton or soft cloth.
- Use the toner twice a day for better skin renovates results.

**III. EVALUATION PARAMETER**

1. **PH:** The formulation 25ml was taken in a beaker and now calibrate the PH meter was made in the formulation for some time and reading was recorded.
2. **Surface Tension:** The formulation was transferred in stalagmometer and the surface tension was recorded.
3. **Skin Irritation:** Small amount of the toner was sprayed on hand dorsal skin and kept for some time result was found Non-irritant on the skin.
4. **Stickiness:** The particles of the toner were not found to be sticky in nature.
5. **Skin Conditioning:** The appearance of the skin after application of the toner was seen to be smooth, hydrated and glowing.
6. **Temperature Variation:** The temperature was exposed to different temperature at 27°C & 4°C.
7. **Spreadability:** The toner was spray on hand and spread by cotton and smooth cloth and easily spread.
8. **Removal:** The face toner is easily washable.

#### IV. RESULT & DISCUSSION

The final expression was subordinated to various physicochemical tests. All the tests were performed according to every test standard procedure. All the results were recorded and found within the standard ranges. The pH, surface tension, stickiness, skin condition, spreadability and stability were studied thoroughly and were within the range. No any discoloration was found after light exposure to the formulation. The formulation was also effective to produce conditioning on the skin and non-irritant in nature. At last the removability of toner was found to be easily removable.

#### Result and Discussion

Sr. No.	Parameter	Result	Range
1.	PH	6.72	5.5-7
2.	Surface tension	60.52 dyne/cm <sup>2</sup>	58-65dyne/cm
3.	Skin irritation	Non-Irritable	Irritable or not.
4.	Skin condition	The skin was moisturised	Moisturized or not.
5.	Temperature variation	Product is stable at extreme temperature with room temperature.	Stable or not
6.	Stickiness	Not much sticky	Sticky or not.
7.	Removable	Easily removable	Remove or not.

Table 3. Result & Discussion

#### V. CONCLUSION

The results from the spray toner formulation were very satisfactory. The purpose behind the toner formulation was to achieve the cooling and toning effect on the skin was found to be satisfactory. Similarly, the intention behind formulating it in the mist form was to ease in carrying the formulation and application whenever and wherever needed. And the studied formulation proved to be satisfactory from that perspective as well. After application, there was no irritability, rashes, but some cleansing effect was observed. It is suggested that the prepared formulation is physio-chemically stable, and possessed characteristics of a standard cosmeceuticals formulation for skincare. The spray formulation gave a more effective form to this formulation because spraying smaller particles on the skin with a certain amount of force made the formulation penetrate the small pores of the skin in a better way than any other form like gel or lotion.

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