

**SAPONIFICATION EQUIVALENT OF *DASAMULA TAILA*****R. B. SAXENA***Drug Standardisation Research Project (C.C.R.A.S.), Dhanvantri Mandir,  
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**ABSTRACT:** *Saponification equivalent values of Dasamula taila are very useful for the technical and analytical work. It gives the mean molecular weight of the glycerides and acids present in Dasamula Taila. Saponification equivalent values of Dasamula taila are reported in different packings.*

**INTRODUCTION**

It would not be an exaggeration if one status that science of Ayurveda pivots around the concept of saponification equivalent (SE). SE is the number of grams of taila saponified by 56.11 grams of KOH. SE values are the utmost importance in both analysis and technical works. It gives immediately the mean molecular weight. The study of Dasmula taila has also been done<sup>1-7</sup>. Hence, the present communication describes the determination of saponification equivalent values of Dasamula taila.

**MATERIALS AND METHODS**

All reagents used were of A.R. grade and were used without further purification.

**Process:** Weight W grams of Dasmula taila to be analysed into 200 ml conical flask, added accurately measure 50 ml N ethanolic KOH solution and attached the reflux condenser to the flask. Boiled the solution for half an hour, added 1 ml phenolphthalein indicator and slowly titrated the hot soap solution with N Hcl. At the same time and conditions, the blank titration was also done<sup>8</sup>.

$$\text{Saponification equivalent} = \frac{56110 \times W}{28.055 (b-a)} \quad (1)$$

W = Weight of Dasmula taila

a = titration value

b = blank titration value

## RESULTS AND DISCUSSION

Constant saponification equivalent values of glass light packing indicate the best packing than other packing, table 1 SE values found less from initial value show the formation lactones and estolides rings. In plastic light packing the SE values are increasing as time

increases, show the formation of Di or monoglucerides compounds. After eight months, SE values of glass and plastic dark packing are found constant, the formation of Di – or – Monoglycerides compounds have been completed<sup>9</sup>.

**TABLE 1**

### **Saponification of equivalent values of *Dasmula taila***

S.No.	Type of packing	Month			
		04	08	12	16
1	Initial	295.25	295.25	295.25	295.25
2	GL	295.94	295.83	295.88	295.81
3	GD	295.94	297.48	297.42	297.40
4	PD	296.17	297.68	297.63	297.63
5	PL	296.13	296.49	299.01	300.58

GL = Glass light, GD = Glass dark, PD = Plastic dark and PL = Plastic light

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