

PRODUCT SPECIFICATION

PRODUCT: Emulsifying Wax

GRADE: Ionic / Anionic

INTRODUCTION: Emulsifying wax is a type of cosmetic emulsifying ingredient used primarily in the manufacturing of creams, lotions, and other beauty products that have both water and oil phase. This type of wax helps in mixing or emulsifying the water phase and oil phase together to form an ointment. The emulsification occurs when two substances — in this case, oil and water — are successfully bound together, creating a sort of glue that combines the ingredients of a product. At the molecular level, Emulsifying wax attracts both water and oil at the same time and keeps them together. Emulsions, made with this wax are more stable to weak acids such as Boric, Carbolic & Salicylic. It is also more stable to mild oxidizing & reducing agents than soap. This type of wax is used by cosmetics manufacturers. Emulsifying wax thickens the liquid and marries the oil - and water-based elements of the creation. It is white in colour, solid, and possesses a light alcohol scent.

APPLICATION: Emulsifying Wax is widely used in the Pharmaceutical / Cosmetic industry as a part of creams and lotion formulations.

Ionic / Anionic Emulsifying Wax is most suitable in water in oil type of emulsion.

COMPOSITION:

Sr. no.	Component	Percentage
1	Cetostearyl Alcohol	89.5
2	Sodium Lauryl Sulfate	10
3	Purified water	0.5

TYPICAL PROPERTIES

CHARACTERS:

Sr. no.	Characteristic	Test Method	Acceptance Criteria
1	Appearance	BP / Ph. Eur.	An almost white or pale yellow, waxy solid or flakes, becoming plastic when warmed.
2	Solubility	BP / Ph. Eur.	Practically insoluble in water, forming an emulsion; partly soluble in <i>ethanol</i> (96%).

IDENTIFICATION (as per BP):

Ref. alphabet	Identification	Test Method	Acceptance Criteria
A		BP / Ph. Eur.	About 52 °C
B	Sulphated Ash	BP / Ph. Eur.	1.8 to 3.3 %

TESTS:

Sr. no.	Test	Test Method	Acceptance Criteria
1	Acidity	BP / Ph. Eur.	Not more than 1.0 ml of 0.1M <i>sodium hydroxide</i> VS is required.
2	Alkalinity	BP / Ph. Eur.	No colour is produced on the addition of 0.5 ml of phenolphthalein solution.
3	Alcohols	BP / Ph. Eur.	The difference between the titrations is 12.8 to 14.2 ml.
4	Iodine value	BP / Ph. Eur.	Not more than 3.0
5	Saponification value	BP / Ph. Eur.	Not more than 2.0
6	Sodium alkyl sulphates	BP / Ph. Eur.	Not less than 8.7 %
7	Unsaponifiable matter	BP / Ph. Eur.	Not less than 86.0%
8	Water	BP / Ph. Eur.	Not more than 4.0% w/w

Remarks: The sample complies with prescribed standards as per British Pharmacopoeia specifications.

The product also complies as per ICH Q2C (R4) guidelines and USP <467> for Residual Solvents.

Packing: 25 kg Cartons / Bags