

PRODUCT SPECIFICATION

PRODUCT: Emulsifying Wax

GRADES: Non-Ionic

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.

Non-Ionic Emulsifying Wax is most suitable for oil in water type of emulsion.

COMPOSITION:

Sr. no.	Component	Percentage
1	Cetostearyl Alcohol	80
2	Macrogol Cetostearyl Ether (22)	20

TYPICAL PROPERTIES

CHARACTERS:

Sr. no.	Characteristic	Test Method	Acceptance Criteria
1	Appearance	BP / Ph. Eur.	A white or almost white, waxy solid or flakes melting when heated to a clear almost colourless liquid.
2	Solubility	BP / Ph. Eur.	Practically insoluble in <i>water</i> , producing an emulsion; moderately soluble in <i>ethanol (96%)</i> ; partly soluble in <i>ether</i> .

IDENTIFICATION (as per BP):

Ref. alphabet	Identification	Test Method	Acceptance Criteria
A		BP / Ph. Eur.	The residue is negligible
B	Sulphated Ash	BP / Ph. Eur.	Not more than 0.1 %

TESTS:

Sr. no.	Test	Test Method	Acceptance Criteria
1	Acid value	BP / Ph. Eur.	Not more than 0.5
2	Refractive index at 60 °C	BP / Ph. Eur.	1.435 to 1.439
3	Solidifying point, °C	BP / Ph. Eur.	45 to 53
4	Alkalinity	BP / Ph. Eur.	Not more than 0.5 ml of 0.1 M <i>hydrochloric acid VS</i> is required for neutralisation using <i>phenolphthalein solution R1</i> as indicator.
5	Hydroxyl value	BP / Ph. Eur.	175 to 192
6	Saponification value	BP / Ph. Eur.	Not more than 2.0

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