

Crodex™

Emulsifying waxes BP and BPC

The emulsifying waxes which appear in the British Pharmacopeia and the British Pharmaceutical Codex have long been established as base materials for application in pharmaceuticals and cosmetics.

Use of these materials simplifies the formulation of cream and lotion vehicles for medicaments. They may also be compounded into cosmetic systems, where they exert both an emulsifying and stabilising influence.

Crodex A - anionic emulsifying wax BP

Crodex A is prepared from cetostearyl alcohol and sodium lauryl sulphate and is an almost white, waxy solid with a faint, characteristic odour. It conforms to the BP monograph for anionic emulsifying wax and is a useful, economic, general purpose emulsifier, suitable for use in both pharmaceutical and cosmetic applications.

Crodex A produces emulsions which possess an excellent dry emollience, are free from dehydrating and degreasing effects and are stable to weak acids, alkalis and some metal salts. These emulsions are stable and self-bodying and do not normally require the addition of other waxes to produce cream systems. They will normally be oil-in-water in nature, although it is possible to produce water-in-oil creams from high fat content emulsions by employing Crodex A as an auxiliary emulsifier.

Crodex A is utilised in the manufacture of official BP preparations, emulsified ointments and simple creams. In cosmetics, it may also be employed in sunscreen, cold, day, hair, depilatory, lubricating and insect repellent creams.

In general, 5-15% Crodex A is employed in the preparation of emulsions. These are made by combining the Crodex A with the oil phase and heating to 70°C. The water phase, including all water soluble components is heated separately to 70-75°C. The oil phase is then poured into this in a thin stream and the whole stirred until the temperature falls to 30-35°C. Virtually any efficient type of agitation is acceptable. If resultant emulsions are of a granular texture, they should be reheated and stirred until cool. Emulsions based upon Crodex A should be adequately preserved.

Crodex N - nonionic emulsifying wax BP

Crodex N is prepared from cetostearyl alcohol and Cetomacrogol 1000 BP. It is an almost white, waxy solid with a faint, characteristic odour and conforms to the BP specification for Cetomacrogol emulsifying wax. Crodex N is a self-bodying emulsifying wax which is an effective emulsifier for most emollient materials employed in cosmetics and pharmaceuticals, producing highly stable emulsions. The wetting properties of Crodex N facilitate contact and penetration of medicaments onto the skin.

The general technique described for the production of emulsions based on Crodex A may be employed for emulsions based on 5-20% Crodex N. Emulsions based on Crodex N should be adequately preserved.

Full specification details for the above emulsifying waxes are available on request.

Health and Safety

Crodex A and N are well established cosmetic and pharmaceutical raw materials and are considered to present no special hazards. They contain either an anionic or nonionic surface active agent respectively. Due to the presence of the surface active agent, these materials may cause irritation to the eye and, on prolonged contact, to the skin.

INCI name

Crodex A – Cetearyl Alcohol and Sodium Lauryl Sulfate

Crodex N – Cetearyl Alcohol (and) Cetareth-22

Non-warranty

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