

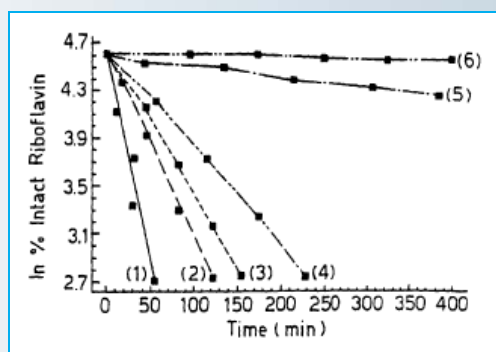
Personal care products: Protection of light-sensitive active ingredients

Background

Active Ingredient protection from UV light by enclosing active ingredients in personal care formulations within a liposome formulation.

Technology

A delivery technology designed to protect photolabile compounds using liposomes. The active ingredient is formed into a complex with cyclodextrin, and then encapsulated into the liposome along with a photostabilising compound. This could be a light absorber and/or an antioxidant. The photostabilised material may be freeze-dried until required and then rehydrated.



Breakdown of riboflavin encapsulated into different liposome formulations. Line (6) represents the optimal Dstl formulation

The liposome technology is well characterized, through its use for drug formulation by a UK-based specialist drug delivery company.

Applications

- Skin creams & lotions
- Advanced cosmetic products
- Other topical personal care products

Benefits

- Excellent protection of sensitive ingredients
- Allows the use of ingredients that were previously discounted due to light sensitivity
- Stabilised material can be freeze-dried
- Provides product differentiation in the market
- Low cost of goods
- Easy to manufacture with standard techniques
- Expertise and know-how available, gained from use of the liposomes for drug delivery

Intellectual Property

Patent Granted in: Europe (Germany, France, Italy, UK), Australia, South Africa, USA.

Pending in Japan.

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Research and development work on this technology was performed by collaborators at University of London School of Pharmacy. Further development support is available, subject to agreement.

Licensing & Partnering Opportunity

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