



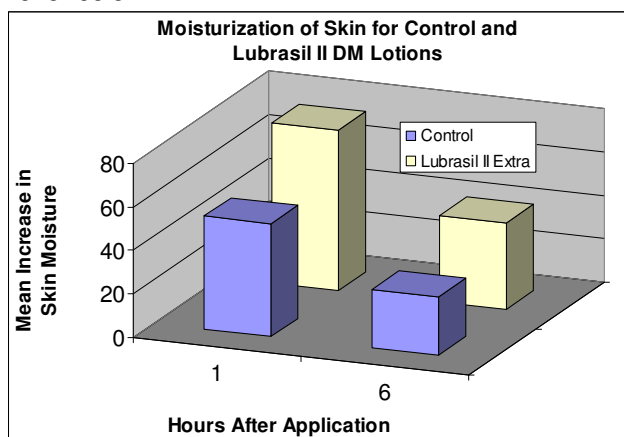
LUBRASIL™ II DM microemulsion

Description:

Lubrasil II DM was created to facilitate the need for an effective delivery system of silicone at a relatively low cost. Silicone is extremely important in today's cosmetic formulations. It lends an excellent velvety smooth feel to creams and lotions, hair care products, makeup and powders. Lubrajel is also an extremely important component of the same, lending rheology modification, lubrication and moisture balancing. Combining these two materials would result in a superior product possessing the desirable properties of each, complementing each other in an elegant manner.

Lubrasil II DM is the unique integration of silicone (dimethicone) and Lubrajel [Glycerin and Glyceryl Acrylate/ Acrylic Acid Copolymer] in which the silicone oil is microemulsified using proprietary manufacturing technology.

Lubrasil II DM when used in skin care products will impart a richness that doesn't leave a residue and is quickly absorbed into the skin. Your skin will feel light, silky and more moisturized throughout the day (See graph below). For hair care applications, hair will be visibly less frizzy, shinier, and have a deeper, richer color.



Uses:

Lubrasil II DM is used in skin care products at levels between 2.5 and 10% and may be used in hair care products such as shampoo and conditioners at similar concentrations.

Formulators can incorporate Vitamin E or A and D in Lubrasil II DM using a cold process mix.

Lubrasil II DM is compatible to varying degrees with nonionic surfactants, some anionic surfactants, and most water-soluble or dispersible materials that are not highly ionized.

Nomenclature:

CAS: 56-81-5, 9003-01-4, 9002-92-0, 63148-62-9
Proposed INCI: Glycerin (and) Glyceryl Acrylate/ Acrylic Acid Copolymer (and) Laureth-23 (and) Dimethicone
EINECS (Europe): 200-289-5, 201-177-9, N/A, N/A
DSL/NDSL (Canada): 1650, 8957, 8952, 14879
ENCS (Japan): JSCI 001223, JCIC 108622, JSCI 105370, N/A
AICS(Australia): All components comply

Typical Properties:

These Values are typical properties only and not necessarily specifications. Specifications and test methods are available upon request.

Form:	Viscous Gel
Color:	Iridescent
Appearance @ 20-30 °C:	Clear / Opalescent
pH (neat) @ 20-25 °C:	5.3
Viscosity, @ 20-25 °C (Brookfield DV-II, spindle 7, 50 rpm):	45,000 cps
Refractive Index @ 22-24 °C:	1.406

Testing:

United-Guardian has not performed any animal testing on Lubrasil II DM.

Derivation:

United-Guardian does not use any animal derived ingredients in the manufacture of Lubrasil. All raw materials used in Lubrasil II DM are of synthetic or vegetable origin.

Storage and Handling:

Lubrasil II DM is a very slippery material and proper care should be taken in its handling and use. Avoid contact with strong acids, alkalis or oxidizing agents. Avoid exposure to x-rays.

Availability:

Lubrasil II DM is available in 45-pound pails and 500-pound drums.

Contact Guardian Laboratories for information about samples or sales.