**Do you want a film former that boosts SPF water resistance and is 100% naturally derived, biodegradable and easy to formulate with? Well, if you do (and who wouldn’t?!), let us introduce you to Dermol MBDD.**

Category: Sun Care

**HS1-133: Dermol MBDD Organic Sunscreen Lotion SPF 30**

|  |  |  |  |
| --- | --- | --- | --- |
| Ingredient | INCI | Supplier | W/W% |
| Phase A |  |  |  |
| Water | Water | -- | 60.3 |
| 1,3 Butylene Glycol | Butylene Glycol | Alzo International | 2 |
| Phenoxetol | Phenoxyethanol | Clariant | 0.5 |
| Dermol CG | Caprylyl glycol | Alzo International | 0.5 |
| Dissolvine NA2-S | Disodium EDTA | Akzo Nobel | 0.2 |
| XG FNCSP-PC | Xanthan Gum | Jungbunzlauer (Univar) | 0.5 |
| Dermothix 100 | **Disteareth-100 IPDI** | **Alzo International** | **3** |
| Phase B  |  |  |  |
| Neo Heliopan 357 | Avobenzone | Symrise | 3 |
| Neo Heliopan 303 | Octocrylene | Symrise | 5 |
| Neo Heliopan OS | Octisalate | Symrise | 5 |
| Neo Heliopan HMS | Homosalate | Symrise | 5 |
| Elefac I-205 | Octyldodecyl Neopentanoate | Alzo International | 5 |
| Bernel Ester DCM | **Dicaprylyl Maleate** | **Alzo International** | **5** |
| Dermol MBDD | **Mango Butter Dimer Dilinoleyl Esters/Dimer Dilinoleate Copolymer** | **Alzo International** | **5** |
| Total |  |  | **100.0** |

**Manufacturing Procedure:**

1. Combine Phase A, except Xanthan Gum & Dermothix 100, into main beaker and begin heating to 65-70° C then add Xanthan Gum to water under Silverson mixing.
2. Once at 65-70° C and a transparent gel is formed, then add Dermothix 100 & mix until homogenous & clear
3. In side beaker, combine components of phase B, heat to 70° C and mix until all ingredients are dissolved.
4. Emulsify by add phase B to A under high shear for 10 minutes at 6,000 rpm, then begin cooling. Mix the remainder of the batch at 3,000 rpm.

**Alzo Product Benefits:**

**Bernel Ester DCM** – lightweight, naturally derived ester with excellent powder sunscreen solvency. A great, less shiny alternative to synthetic sunscreen emollients

**Dermol MBDD** – naturally-derived polymer from mango butter & rapeseed oil; oil soluble, liquid film former that improves SPF water resistance

**Dermothix 100** – water soluble thickener and gelling agent for aqueous systems; high internal phase o/w emulsifier; broad pH stability 2-12