

## **Waterproof Mascara**

(Sample Recipe for Iso-Dimethicone-Copolymer)

## Waterproof Mascara

| Phase A  | Weight % | For 50 g / 1.8 oz |
|--|----------|-------------------|
| Carnauba Wax (thickener)                                     | 1 %      | 0.5 g             |
| Candelilla Wax (thickener)                                   | 5 %      | 2.5 g             |
| Beeswax (thickener)  | 5 %      | 2.5 g             |
| Ozokerite Wax (thickener)                                    | 2 %      | 1 g               |
| Stearic Acid (emulsifier)                                    | 5 %      | 2.5 g             |
| Cetyl Alcohol (thickener, emollient)                         | 3 %      | 1.5 g             |
| Mineral Oil (emollient)                                      | 3 %      | 1.5 g             |
| Phase B  |          |                   |
| Deionized Water (diluent)                                    | 53.3 %   | 27.1 g            |
| Iso-Dimethicone-Copolymer (thickener, waterproofing polymer) | 5 %      | 2.5 g             |
| Propylene Glycol (humectant)                                 | 3 %      | 1.5 g             |
| Triethanolamine (neutralizer)                                | 0.7 %    | 0.4 g / 8 drops   |
| Phase C  |          |                   |
| Propylene Glycol (humectant)                                 | 3 %      | 1.5 g             |
| Iron Oxides (pigment)  | 5 %      | 2.5 g             |
| Carbon Black (colorant)                                      | 5 %      | 2.5 g             |
| Phase D  |          |                   |
| Paraben-DU (preservative)                                    | 1 %      | 0.5 g / 10 drops  |

## Method

For best results, use a 0.1g precise scale. Combine all the ingredients of Phase A and heat to 85C/185F. Combine all the ingredients of Phase B with the exception of the Iso-dimethicone copolymer. Begin mixing/agitation of Phase B and slowly sift in the Iso-dimethicone copolymer and heat to 85C/185F. When each phase is uniform, add Phase A to Phase B. With constant agitation add Phase C. Homogenize or mix really well to get a smooth consistency. Cool to 50C/120F, add Phase D. If mascara is too thick, dilute some with hot water. Package into mascara containers while still fluid.

## **Properties**

Combination of pigments and carbon black for nice black mascara. Acrylates copolymer provides water resistance, increased moisture protection, and rub-off resistance. We found that the mascara stays on best when dusting lashes with face powder before applying mascara.