

# Sun Cream

## Sun Care: Water-in-Oil Emulsion

Formulation 01414

### ATTRIBUTES

- Ease of Spreading
- Water-in-Oil Emulsion

### DOW CORNING® PRODUCTS

- XIAMETER® PMX-200 SILICONE FLUID, 5 CST.
- DOW CORNING® 556 COSMETIC GRADE FLUID
- DOW CORNING® BY 25-337
- DOW CORNING® FZ-3196

### Ingredient

Wt. % Trade Name/Supplier

#### Phase A

- |   |   |   |
|---|---|---|
| 1. Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine | 2 | Tinosorb S / Ciba Specialty Chemicals Corporation |
| 2. Ethylhexyl Salicylate                          | 5 | Neo Heliopan OS / Symrise                         |
| 3. Ethylhexyl Methoxycinnamate                    | 5 | Neo Heliopan AV / Symrise                         |

#### Phase B

- |  |     |  |
|--|-----|--|
| 4. PEG/PPG-19/19 Dimethicone (and) C13-16 Isoparaffin (and) C10-13 Isoparaffin | 7   | DOW CORNING® BY 25-337                   |
| 5. Dimethicone   | 9.5 | XIAMETER® PMX-200 SILICONE FLUID, 5 CST. |
| 6. Caprylyl Methicone  | 9.5 | DOW CORNING® FZ-3196                     |
| 7. Phenyl Trimethicone   | 2   | DOW CORNING® 556 COSMETIC GRADE FLUID    |

#### Phase C

- |                    |      |                                     |
|--------------------|------|-------------------------------------|
| 8. Water           | 48.7 |                                     |
| 9. Sodium Chloride | 1    | Sodium Chloride / Fisher Scientific |
| 10. Glycerin       | 5    | Glycerin / No Supplier Specified    |

#### Phase D

- |   |   |   |
|---|---|---|
| 11. Methylene Bis-Benzotriazolyl Tetramethylbutylphenol | 5 | Tinosorb M / Ciba Specialty Chemicals Corporation |
|---|---|---|

#### Phase E

- |                    |     |                      |
|--------------------|-----|----------------------|
| 12. DMDM Hydantoin | 0.3 | Glydant 2000 / Lonza |
|--------------------|-----|----------------------|

### Procedure

1. Combine ingredients of phase A and heat to 85°C for 10 minutes.
2. Combine phases A and B, mixing until homogeneous.
3. Combine ingredients of phase C and mix until homogeneous.
4. Slowly add phase C to phase (A+B), drop by drop (with a pipette) while mixing at 700 rpm.
5. After the addition is complete, mix for an additional 5 minutes at 2000 rpm.
6. Add phase D then phase E and mix for 5 minutes at 2000 rpm.
7. Pass through high shear mixer (Silverson: 1min15s for 250 g)

**Variations**

Alternative Dow Corning® products have not been tested as of this printing.

**Stability**

Stable for at least 3 months at room temperature and 40°C.

**External Reference Material**

No external references identified as of this printing.

**Dow Corning® Application Patents**

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