

## **BIOGEL® VLHS**

(INCI: Dimer Dilinoleyl Dimer Dilinoleate (and) Triisostearin (and) Hydroxystearic Acid)

**BIOGEL VLHS** is a 100% active 100% vegetable-derived gel. It is composed of Dimer Dilinoleyl Dimer Dilinoleate (and) Triisostearin (and) Hydroxystearic Acid.

It can be described as a vegetable-based petrolatum. **BIOGEL VLHS** spreads easily on skin resulting in a glossy emollient non-tacky coating. It is useful in lip gloss and foundation products and where occlusive moisturization are desired. **BIOGEL VLHS** is sustainable, biodegradable, and environmentally friendly. It is generally soluble in esters and oils but not soluble in silicones or water.

| Trade Name          | INCI Name  | CAS #                                |
|---------------------|--|--------------------------------------|
| <b>BIOGEL VLHS</b>  | Dimer Dilinoleyl Dimer Dilinoleate (and) Triisostearin (and) Hydroxystearic Acid | 378789-58-3,<br>26942-95-0, 106-14-9 |
| <b>PELEMOL DD</b>   | Dimer Dilinoleyl Dimer Dilinoleate   | 378789-58-3                          |
| <b>PELEMOL GTIS</b> | Triisostearin  | 26942-95-0                           |
| <b>PHOENATE HSA</b> | Hydroxystearic Acid  | 106-14-9                             |

**BIOGEL VLHS** is REACH and China compliant.

### **TYPICAL PROPERTIES**

(Not to be taken as Specifications)

|                                 |                        |
|---------------------------------|------------------------|
| Appearance @ 25°C               | Clear to hazy firm gel |
| Color, Gardner                  | 1                      |
| Acid Value, mg KOH/gm           | 4                      |
| Saponification Value, mg KOH/gm | 125                    |
| Ref. Index @ 58°C               | 1.4750                 |
| Melting point, °C               | 42                     |
| @36°C                           | Starting to solidify   |
| @33°C                           | Soft gel               |
| @30°C                           | Hard gel               |
| Viscosity @ 58°C                |                        |
| LVT #1 @ 12 rpm, Cps.           | 200                    |

## SOLUBILITY

|   |   |
|---|---|
| WATER   | i |
| PROPYLENE GLYCOL                                  | i |
| ETHANOL 200 Proof                                 | i |
| MINERAL OIL                                       | m |
| ISODODECANE                                       | m |
| ISOPROPYL MYRISTATE (PELEMOL IPM)                 | m |
| CASTOR OIL  | m |
| CYCLOMETHICONE (DC 345)                           | i |
| DIMETHICONE (DC 200-100CST)                       | i |
| ISONONYL ISONONANOATE (PELEMOL IN-2)              | m |
| PENTAERYTHRITYL TETRAETHYLHEXANOATE (PELEMOL PTO) | m |

i = insoluble

m = miscible (all %'s)

## SAFETY

|  |                        |
|--|------------------------|
| <b>*RIPT Study (50 human subjects) conclusions follow:</b> |                        |
| SKIN IRRITATION  | NON-PRIMARY IRRITANT   |
| SKIN SENSITIZATION   | NON-PRIMARY SENSITIZER |

**BIOGEL VLHS** can be considered for use in Hypoallergenic products.

\* Studies conducted by AMA Labs, 216 Congers Rd., New City, NY 10956

09/18/2017

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