



Skin Care



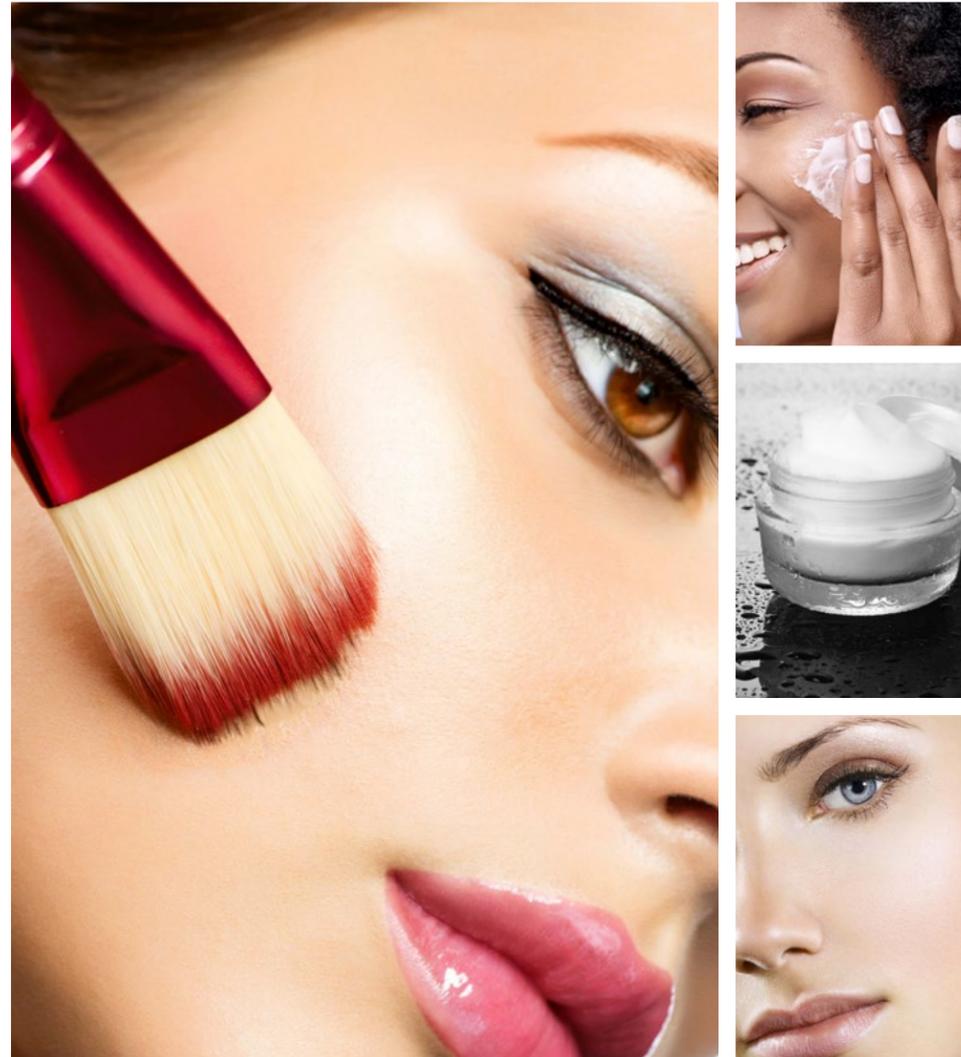
Silicone Ingredients For Custom Solutions.

WAUKEGAN, IL | WWW.ANDISIL-PERSONAL-CARE.COM



Custom Capabilities & Blending

- » Silicones formulated to suit your needs
- » Specialty silicone product line inspired by current market trends
- » Custom blending capabilities offering ease of formulation and cost reduction
- » Full range of cyclics, cyclic blends, dimethicones, and volatile linear fluids for the formulator
- » Top quality service from synthesis to delivery
- » US Manufacturer & Illinois-based warehousing resulting in minimal lead times



| PEG-Free Emulsifiers | | |
|---|--|---|
| TRADE NAME | INCI NAME | APPLICATION |
| Andisil® SE 500 | Cyclopentasiloxane (and) TMP Dimethicone | Recommended for W/O emulsions; reduces tackiness and greasiness in sun care and skin care formulations |
| Andisil® SE 500C <i>50% Concentrate</i> | Cyclopentasiloxane (and) TMP Dimethicone | Recommended for W/O and W/S emulsions; concentrated emulsifier used in creams, lotions, and sun care |
| Andisil® SE 2300 | Dimethicone (and) TMP Dimethicone | Recommended as a cyclic free emulsifier for W/O cream and lotion formulations and sun care protection; provides excellent stability and organic compatibility |
| Andisil® SE 2300C <i>50% Concentrate</i> | Dimethicone (and) TMP Dimethicone | Cyclic free emulsifier for W/O and W/S emulsions |
| Emulsifiers | | |
| TRADE NAME | INCI NAME | APPLICATION |
| Andisil® SP 518 | Cyclopentasiloxane (and) PEG/PPG-18/18 Dimethicone | Recommended for W/O emulsions; reduces tackiness and greasiness in sun care and skin care formulations |
| Andisil® SP 518C <i>50% Concentrate</i> | Cyclopentasiloxane (and) PEG/PPG-18/18 Dimethicone | Recommended for W/O and W/S emulsions; concentrated emulsifier used in creams, lotions, and sun care |
| Andisil® SP 1001 | Cetyl PEG/PPG-10/1 Dimethicone | Recommended as an emulsifier for W/O cream and lotion formulations and sun care protection; provides excellent stability and organic compatibility |
| Andisil® SP 2318 | Dimethicone (and) PEG/PPG-18/18 Dimethicone | Cyclic free emulsifier for W/O and W/S emulsions |
| Andisil® SP 2318C <i>50% Concentrate</i> | Dimethicone (and) PEG/PPG-18/18 Dimethicone | Concentrated cyclic free emulsifier for W/O and W/S emulsions used in most skin care applications |
| Andisil® SP 4409 | PEG-9 Dimethicone | Recommended for use as a W/O or W/Si emulsifier for skin care and make-up formulations |
| Andisil® SP 4412 | PEG-12 Dimethicone | Recommended in skin care, sun care and make up formulations as a O/W emulsifier; improves aesthetics and reduces surface tension |

Beauty.
In the hands of the formulator



Resin Blend Emulsions

Resin Blend Emulsions offer convenient delivery systems for water-based formulations while maintaining the benefits of the Andisil MQ Resin Blends. These benefits include longer wear, wash-off resistance and film-forming benefits in skin care formulations.

| TRADE NAME | INCI NAME | APPLICATION |
|---|---|--|
| Andisil® EMQ 50CG <i>60% Resin</i> | Cyclopentasiloxane (and) Trimethylsiloxysilicate (and) Laureth-23 (and) Laureth-4 | Provides long lasting wash off resistance in color cosmetics. Also recommended for a smooth, non-greasy feel |
| Andisil® EMQ 2350CG <i>60% Resin</i> | Dimethicone (and) Trimethylsiloxysilicate (and) Laureth-23 (and) Laureth-4 | Provides comfortable long wear with a volatile, non-cyclic carrier fluid; leaves a silky finish on the skin. Highly recommended for color cosmetics with the best abrasion and transfer resistance |
| Andisil® EMQ 3250CG <i>60% Resin</i> | Phenyltrimethicone (and) Trimethylsiloxysilicate (and) Laureth-23 (and) Laureth-4 | Long lasting shine with film forming benefits; improves organic compatibility. Recommended for color cosmetics due to good abrasion and transfer resistance |

**Percent resin content or carrier fluid can be customized to meet your specific formulation requirements*

Resin Blends

Silicone Resins are essential for longer wear, wash-off resistance and film-forming benefits in skin care formulations

| TRADE NAME | INCI NAME | APPLICATION |
|--------------------------------------|--|--|
| Andisil® MQ 50C* <i>50% Resin</i> | Cyclopentasiloxane (and) Trimethylsiloxysilicate | Provides long lasting wash off resistance in skin care applications; recommended for smooth, non-greasy feel |
| Andisil® MQ 2350 <i>50% Resin</i> | Dimethicone (and) Trimethylsiloxysilicate | Provides comfortable long wear with a volatile, non-cyclic carrier fluid; leaves a silky finish on the skin. Highly recommended for color cosmetics with the best abrasion and transfer resistance |
| Andisil® MQ 5230 <i>30% Resin</i> | Dimethicone (and) Trimethylsiloxysilicate | Film forming benefits with a non-volatile carrier |
| Andisil® MQ 3250 <i>50% Resin</i> | Phenyltrimethicone (and) Trimethylsiloxysilicate | Long lasting shine with film forming benefits; improves organic compatibility. Recommended for color cosmetics offering good abrasion and transfer resistance |
| Andisil® MQ 3430 <i>30% Resin</i> | Diphenyl Dimethicone (and) Trimethylsiloxysilicate | Smooth texture that offers long lasting shine; film forming benefits with a non-volatile carrier |

**Percent resin content or carrier fluid can be customized to meet your specific formulation requirements*

Wax

| TRADE NAME | INCI NAME | APPLICATION |
|---|---|---|
| Andisil® SW 1894 <i>Melting Point 36-42 °C</i> | Bis-PEG-18 Methyl Ether Dimethyl Silane | Recommended for hydrating formulations providing a smooth and soft feel; good organic compatibility; can provide thickening benefits to formulations where high viscosities are desired |



Film Forming



Spreadability



Softness



Hydration

Phenyl Modified Siloxane Fluids

Recommended to increase shine and gloss in color cosmetics; offer excellent compatibility with organic ingredients; utilized for Refractive Index matching in clear skin care formulations

| TRADE NAME | INCI NAME | APPLICATION |
|--|---------------------------------------|--|
| Andisil® PDM 1222* <i>RI 1.4360</i> | Diphenyl Dimethicone | Recommended for anti-wrinkle cosmetics due to refractive index matching |
| Andisil® PTM 34 <i>RI 1.4540</i> | Phenyltrimethicone (and) Dimethiconol | Provides improved film forming properties |
| Andisil® PTM 20 <i>RI 1.4600</i> | Phenyltrimethicone | Recommended for dry, non-oily finish and tack reduction; slows water loss by creating a barrier on the skin; ideal for sun care applications. Most commonly utilized phenyl silicone in Personal Care applications |
| Andisil® PDM 1443* <i>RI 1.5050</i> | Diphenyl Dimethicone | Recommended for use in color cosmetics where increased refractive index is needed |
| Andisil® PXL 2450 <i>RI 1.4630</i> | Hydrogen Diphenyl Dimethicone | Recommended for use as a surface treatment modifier in pigment coatings |
| Andisil® PXL 2460 <i>RI 1.5000</i> | Hydrogen Diphenyl Dimethicone | Recommended for use as a surface treatment modifier in pigment coatings |

**Refractive index can be customized to meet your specific formulation requirements*

Polyether Copolymers

Used as emulsifying and co-solubilizing agents for siloxane and organic systems

| TRADE NAME | INCI NAME | APPLICATION |
|---------------------------------------|---------------------------|---|
| Andisil® SP 4410 <i>HLB: 4.5</i> | PEG-10 Dimethicone | Recommended for reduced skin irritation and water solubility; recommended for antiperspirants |
| Andisil® SP 1818 <i>HLB: 7.0</i> | PEG/PPG-18/18 Dimethicone | Recommended for applications that need a surface tension depressant and improved wetting properties |
| Andisil® SP 4414B <i>HLB: 8.7</i> | Bis-PEG-12 Dimethicone | Recommended for skin care applications where lubricity, softness and conditioning are desired |
| Andisil® SP 4410B <i>HLB: 10.5</i> | Bis-PEG-10 Dimethicone | Recommended for use with organic compounds to improve surface tension |
| Andisil® SP 4414 <i>HLB: 13.0</i> | PEG-12 Dimethicone | Provides softness and lubricity to lotions and creams; also used as a surface tension depressant. Improves foam stability and density when foaming is desired |

Beauty.
In the hands of the formulator





Specialty Fluids

| TRADE NAME | INCI NAME | APPLICATION |
|--------------------|--------------------------------------|--|
| Andisil® FS 105 | Trifluoropropyl Dimethicone | Recommended for oil repellency in color cosmetics; lowers surface tension in creams and lotions; low refractive index |
| Andisil® FSXL 4505 | Hydrogen Trifluoropropyl Dimethicone | Recommended for use as a surface treatment modifier for oil repellency in pigment coatings; low refractive index |
| Andisil® XL 11 | Hydrogen Dimethicone | Recommended for use as a surface treatment modifier in pigment coatings; reduces the hydrogen diffusion in formulation |
| Andisil® MH30 | Methicone | Recommended for use as a surface treatment modifier in pigment coatings |

Linear Siloxanes

| TRADE NAME | INCI NAME | APPLICATION |
|------------------|-------------|--|
| Andisil® SF 0.65 | Disiloxane | Greatest volatility of linear and cyclic siloxanes |
| Andisil® SF 1 | Trisiloxane | Recommended for fast volatility |
| Andisil® SF 1.5 | Dimethicone | Recommended for fast volatility |
| Andisil® SF 2 | Dimethicone | Recommended for medium volatility |
| Andisil® SF 3.5 | Dimethicone | Partial Volatility; potential D5 replacement based on volatility profile |

Dimethicones

| TRADE NAME | INCI NAME | APPLICATION |
|---|-------------|--|
| Andisil® SF - Low Visc. (5 - 200 cSt) | Dimethicone | Recommended for light soft feel in day creams and sun care products |
| Andisil® SF - Mid Visc. (350 - 5,000 cSt) | Dimethicone | Recommended to add silky smoothness to formulations |
| Andisil® SF - High Visc. (10,000 - 600,000 cSt) | Dimethicone | Recommended for heavier textures or when thicker film properties are desired |



Cushion



Long Wear



Emulsifier



Protectant

Gum Blends*

Combining volatile siloxanes with high MW gums provides excellent water resistance, long wear of actives on skin, and a unique skin feel

| TRADE NAME | INCI NAME | APPLICATION |
|------------------|--|--|
| Andisil® SF 1505 | Cyclopentasiloxane (and) Dimethiconol | Recommended for emolliency in lotions and serums where cyclics are applicable. Added water resistance in sun care products |
| Andisil® SF 1605 | Cyclohexasiloxane (and) Dimethiconol | Provides velvety feel in lotions and creams where cyclics are applicable |
| Andisil® SF 2205 | Dimethicone (and) Dimethiconol | Recommended for smooth application and film forming properties in creams, lotions and serums |
| Andisil® SF 2305 | Dimethicone (and) Dimethiconol | Recommended to improve texture and water resistance in sun care applications where cyclic siloxanes are not used |
| Andisil® SF 2505 | Dimethicone (and) Dimethiconol | Recommended for creams where heavier texture is needed; longer lasting film forming benefits |
| Andisil® SF 3005 | Dimethicone (and) C12-15 Alkyl Benzoate (and) Dimethiconol | Recommended for longer play time applications; provides cascading volatility and strong film forming properties |

*Percent gum and/or carrier fluid can be customized to meet your specific formulation requirements

Gum Blend Emulsions*

Provide ease of use in water-based skin care formulations; easy to use format

| TRADE NAME | INCI NAME | APPLICATION |
|--------------------|--|---|
| Andisil® EM 1505CG | Cyclopentasiloxane (and) Dimethiconol (and) Laureth-23 (and) Laureth-4 | Recommended for emolliency in lotions and serums where cyclics are applicable |
| Andisil® EM 1605CG | Cyclohexasiloxane (and) Dimethiconol (and) Laureth-23 (and) Laureth-4 | Provides velvety feel in skin care where cyclics are applicable |
| Andisil® EM 2205CG | Dimethicone (and) Dimethiconol (and) Laureth-23 (and) Laureth-4 | Recommended for smooth application and feel; non-cyclic blend |
| Andisil® EM 2305CG | Dimethicone (and) Dimethiconol (and) Laureth-23 (and) Laureth-4 | Recommended to improve texture in sun care and creams |
| Andisil® EM 2505CG | Dimethicone (and) Dimethiconol (and) Laureth-23 (and) Laureth-4 | Recommended for night creams and heavier textures |
| Andisil® EM 3005CG | Dimethicone (and) C12-15 Alkyl Benzoate (and) Dimethiconol (and) Trideceth-6 (and) Trideceth-12 (and) Isodeceth-32 | Recommended for cascading volatility and longer play times. |

*Percent active silicone content can be customized to meet your specific formulation requirements

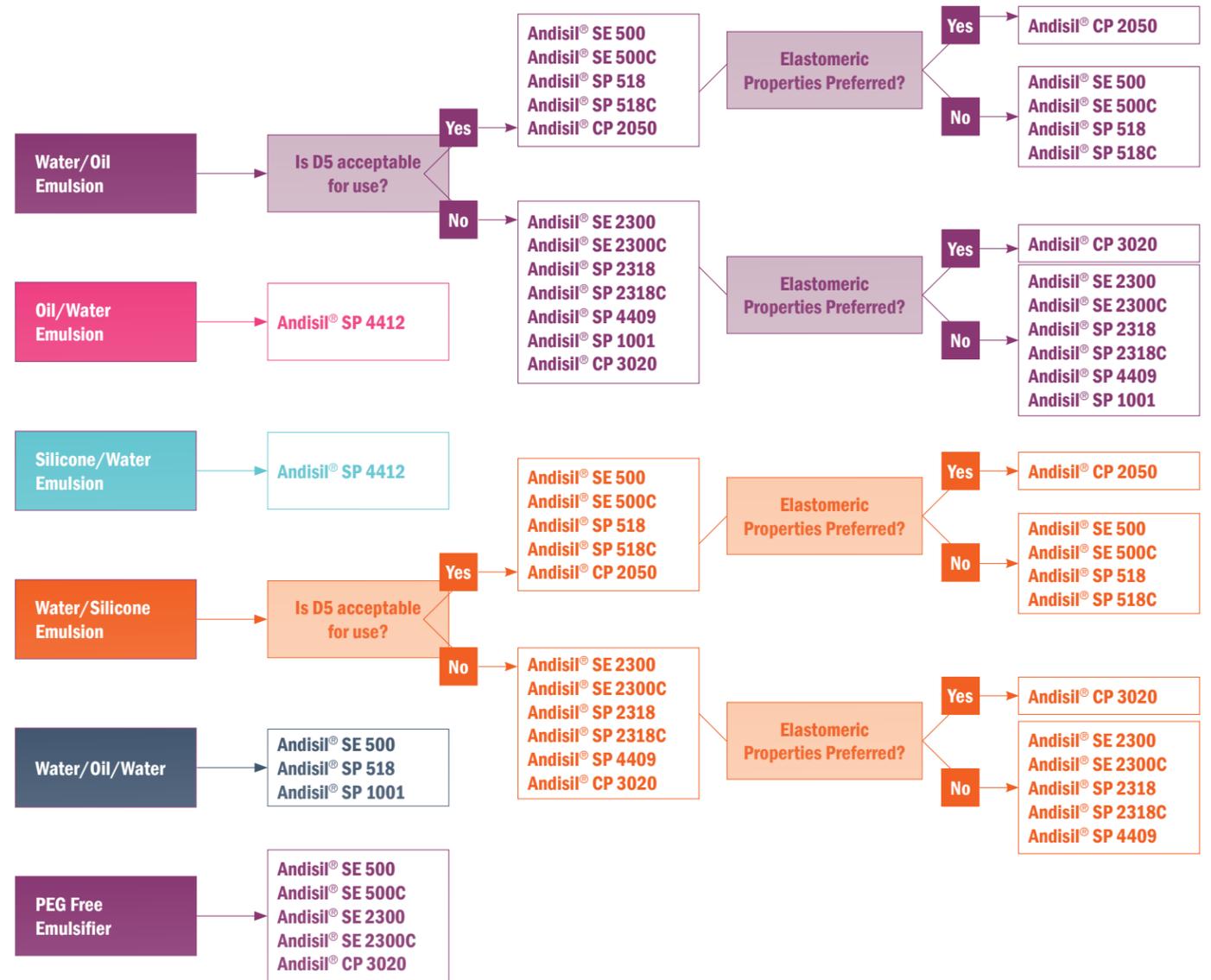
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■ Recommended
◆ Highly Recommended

| APPLICATIONS | CYCLIC SILOXANES | | | DIMETHICONES | | | EMULSIFIERS | | | | | | |
|---------------------------------|------------------|-------------|--------------|-----------------------|-----------------------|------------------------|-----------------|------------------|------------------|------------------|-------------------|------------------|------------------|
| | Andisil® D5 | Andisil® D6 | Andisil® D56 | Andisil® SF Low Visc. | Andisil® SF Mid Visc. | Andisil® SF High Visc. | Andisil® SP 518 | Andisil® SP 518C | Andisil® SP 1001 | Andisil® SP 2318 | Andisil® SP 2318C | Andisil® SP 4409 | Andisil® SP 4412 |
| Antiperspirant / Deodorant | ◆ | ◆ | ◆ | ◆ | | | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| Cleansers | ◆ | ◆ | ◆ | ◆ | ■ | | | | | | | | |
| Creams | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ■ |
| Color Cosmetics | ◆ | ◆ | ◆ | ■ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| Lotions | ◆ | ◆ | ◆ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| Serums | ■ | ■ | ■ | | ◆ | ◆ | | | ■ | | | ■ | |
| Sun Care | ◆ | ◆ | ◆ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| Shaving | ◆ | ◆ | ◆ | ■ | ■ | ■ | | | ■ | | | ■ | |
| BENEFITS | | | | | | | | | | | | | |
| Cushion | | | | | | ■ | | | | | | | |
| Cyclic Alternative | | | | | | | | | ◆ | ◆ | | | |
| Emulsifier | | | | | | | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ■ |
| Film Forming Properties | | | | | | ■ | | | | | | | |
| Foam Stabilization | | | | | | | | | | | | | |
| Long Wear | | | | | | | | | | | | | |
| Lubrication | ■ | ■ | ■ | ◆ | ◆ | ◆ | | | | | | | |
| Moisturizing | | | | ■ | ◆ | ◆ | | | | | | | |
| Oil Repellency | | | | | | | | | | | | | |
| Organic Compatibility | | | | | | | | | ◆ | | | | |
| Skin Protectant | | | | | | ◆ | ◆ | | | | | | |
| Spreadability | ◆ | ◆ | ◆ | ◆ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | ◆ | | |
| Suitable For Clear Formulations | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | ◆ | | | | |
| Suitable For Pigment Coatings | | | | | | | | | | | | | |
| Tack Reduction | ■ | ■ | ■ | ■ | ◆ | ■ | ◆ | ◆ | ◆ | ◆ | | | |
| Transfer Resistance | | | | | | | | | | | | | |
| Wash Off Resistance | | | | | ■ | ■ | | | | | | | |
| Water Repellency | | | | ■ | ■ | ◆ | | | | | | | |
| Wetting Agent | | | | | | | | | | | | ■ | |
| Water Solubility | | | | | | | | | | | | | |

Emulsifier Decision Tree



Water/Oil | Emulsion with water as the internal phase and organic oil as the external phase

Oil/Water | Emulsion with organic oil as the internal phase and water as the external phase

Silicone/Water | Emulsion with silicone as the internal phase and water as the external phase

Water/Silicone | Emulsion with water as the internal phase and silicone as the external phase

Water/Oil/Water | Multiple emulsion with 3 phases, water in organic oil in water

WHO WE ARE

Under our brand, Andisil[®], AB Specialty Silicones offers the personal care marketplace an extensive line of silicone based ingredients as well as the ability to custom formulate raw materials *and* blends to specifically suit your needs. Our technically trained, innovative team and global resources enable us to rapidly and efficiently deliver the latest in technology and product development. AB Specialty Silicones offers the highest degree of personal service and flexibility to meet each customer's requirements.

Our Sales, Distribution, Manufacturing and Research & Development services are ISO 9001 certified.

HEADQUARTERS

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