CoastSouthwest™
Fluid Thinking. Innovative Solutions.™


# STAY AND PLAY SUNSCREEN

Natural solubilizers and an oil soluble, non-irritant preservative make formulating Stay and Play Sunscreen a breeze. The film-forming capability of Endicare® SC-520 increases water-resistance properties and creates an even spray on the skin. With olive-based emulsifiers and shea butter, the skin is protected without a harsh or heavy feel.

| | |
|---|---|
| **PHASE A** | |
| **Deionized Water** | 64.20% |
| **Dissolvine® 220S**[1,2] (Tetrasodium EDTA) | 0.10% |
| **Allantoin**[1,3] (Allantoin) | 0.20% |
| **Endicare® SC-520**[1] (Polyethyloxazoline) | 5.00% |
| **PHASE B** | |
| **Endipure™ SHEA**[1] (Butyrospermum Parkii (Shea) Butter) | 1.50% |
| **Olivatis™ 11**[1,4] (Polyglyceryl-3 Olivate Phosphate) | 1.00% |
| **Viv-GMU**[1,5] (Glyceryl Undecylenate) | 1.00% |
| **Vitamin E Acetate**[1] (Tocopheryl Acetate) | 0.50% |
| **Olivatis™ 13**[1,4] (Polyglyceryl-3 Cetearyl Ether Olivate) | 4.00% |
| **Endimulse® EGDS**[1] (Glycol Distearate) | 2.00% |
| **PHASE C** | |
| **AllyEster™**[1,6] (Ethyl Palmate) | 4.00% |
| **Endicare® TN**[1] (C12-15 Alkyl Benzoate) | 1.00% |
| **Uvasorb MET**[1,3] (Benzophenone-3) | 3.50% |
| **Endicare® AB**[1] (Butyl Methoxydibenzoylmethane) | 1.50% |
| **Endicare® OMC**[1] (Ethylhexyl Methoxycinnamate) | 7.50% |
| **Endicare® OTX**[1] (Octocrylene) | 3.00% |





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1-800-621-0500 | coastsouthwest.com

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## Suppliers

[1]**Coast Southwest, Inc.**, [2]Akzo Nobel Functional Chemicals, LLC., [3]3V, [4]Medolla Limited, [5]Clariant, [6]Allyson Enterprises

## Properties

**pH:** 5.85
**Viscosity:** spindle 3 at 1000 rpm: 600-900 cst.
Estimated SPF value available upon request.
Aerosol compatibility available upon request.

## Procedure

**Phase A** – Add Phase A in order to main vessel under shear mixing and begin heating to 80°C. **Phase B** – In a separate vessel, add Phase B materials under propeller or shear mixing and begin heating to 80°C. **Phase C** – In an additional separate vessel, add Phase C materials under propeller or shear mixing and begin heating to 80°C. Note: This ensures proper solubilization of sunscreens before adding to actual oil phase. Once all materials in Phase C are uniform and clear, add Phase C to Phase B and continue mixing and heating. When Phase A and Phase BC are at temperature, add Phase BC to A slowly under very high shear mixing. Note: If emulsion is not “bright white” stronger mixing might be required, *i.e.* homogenization. Begin cool down. Once emulsion has cooled to 25°-30°C, transfer to final container.