

# Radigard™

## Multifunctional Natural Antioxidant



### Product Description

Radigard™ is inspired by the unique chemistry of the rosemary herb and provides a dependable shield against oxidation for various oils and serves as an excellent substitute for soy-based tocopherol. It is a non-GMO, natural way to extend shelf lives and protect the oil phase of formulations. Rosemary is an excellent ingredient in formulations due to the presence and activity of antioxidant compounds which have significant applications when incorporated into cosmetic and personal care products.



**COSMOS  
APPROVED**

### Key Attributes:

- 100% Biobased
- Preservative free
- Low use level
- Oil Dispersible
- Easy to incorporate
- Alternative to soy-based materials



### Product Function

Radigard™ utilizes an advanced carnosic acid oxidation cascade, providing multiple layers of protection to the oil phase in cosmetic formulations. With carnosic acid sacrificially oxidizing up to three times, it offers heightened stability and significantly extends shelf life, ensuring lasting product freshness and reliability. Radigard™ offers unmatched effectiveness and comes in 4 different carriers: sunflower oil, safflower oil, caprylic/capric triglyceride, and organic canola oil.

Trade Name	INCI
Radigard™ SN-R	Helianthus Annus (Sunflower) Seed Oil, Rosmarinus Officinalis (Rosemary) Leaf Extract
Radigard™ SF-R	Cathamus Tinctorius (Safflower) Seed Oil, Rosmarinus Officinalis (Rosemary) Leaf Extract
Radigard™ CO-R	Canola Oil, Rosmarinus Officinalis (Rosemary) Leaf Extract
Radigard™ CT-R	Caprylic/Capric Triglyceride, Rosmarinus Officinalis (Rosemary) Leaf Extract

## OSI (Oxidative Stability Index) Testing

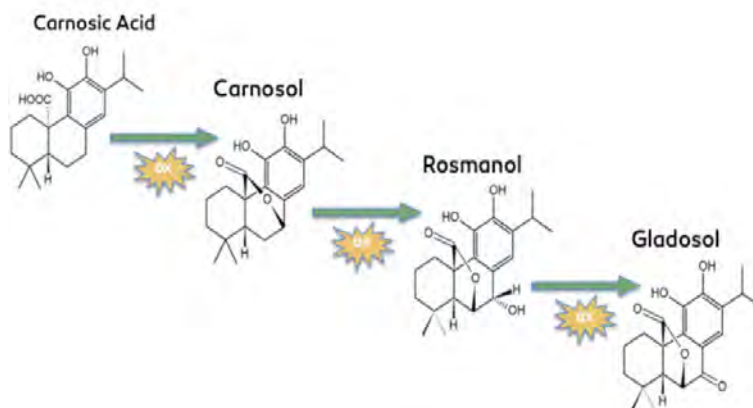


## Product Performance

Radigard™ shows very effective results in OSI (Oxidative Stability Index) Testing when compared to tocopheryl. Even at lower usage levels than the control and competitor, Radigard™ shows that it can protect the oil phase of formulations better than the industry standard.

## Carnosic Acid Cascade

Carnosic acid is able to successfully be sacrificially oxidized three times. This offers cosmetic formulations maximum protection and extension of shelf lives.



### RECOMMENDATION:

USE LEVEL: 0.1-0.5%

TEMPERATURE RANGE: <60°C

PROCEDURE:

Add Radigard™ to oil phase and incorporate by mixing

### Formulation Tips

- Stable up to 85°C
- Best below pH of 7.0
- Minimum of 0.5% of oil phase
- Mineral sunscreens may shift color over time

**SHELF LIFE:** 12 months

**PACKAGING:** 18 kg pail or 180 kg drum

