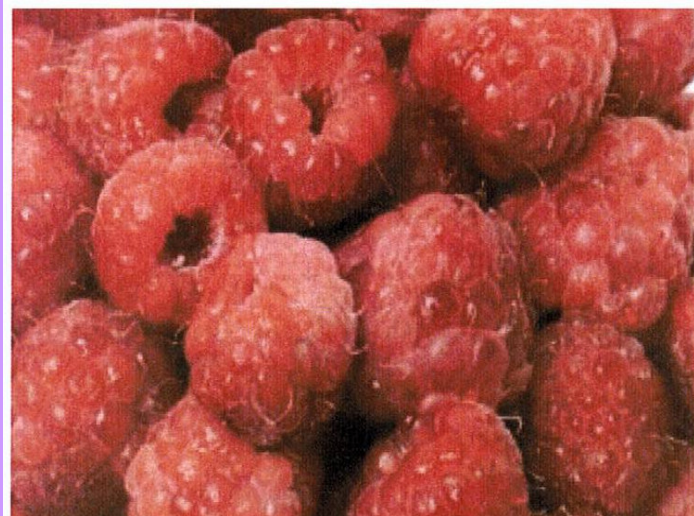




Integrity Ingredients Corporation



IntegriLIPID Raspberry Seed Oil Refined

INCI Nomenclature: Rubus idaeus (Raspberry) Seed Oil

Introduction

Recent research has suggested that the oil from these fruits contain bioactive properties that will help the skin. Raspberry oil is unique because it contains naturally high levels of Vitamin E in the form of gamma-tocopherol, which is the most active form of Vitamin E for protecting the skin. As a result raspberry oil provides natural protection from damaging UV-A and UV-B rays, it has a sun protection factor* (SPF) of 25—50. And in addition to high concentrations of mixed tocopherols (vitamin E), it contains carotenoides (vitamin A). People that are highly active and spend a significant amount of time outdoors will enjoy the benefits of raspberry oil in their soap and skin care products.

Raspberry seed oil is excellent for sensitive skin and is deeply nourishing, softening, emollient, lubrication, conditioning, a lipid barrier providing protection to the skin and provides moisture retention for the skin. This oil has UV absorptive properties* in all three ranges beneficial for photoprotection. The oil was originally developed to prevent cancer and is high in polyphenolic compounds known for their anti-cancer properties. Raspberry seed oil could be incorporated into an emollient cream with melon and hemp oil.

Raspberry oil is known especially for its preventions of gingivitis, rash eczema and other skin lesions. Its use as a cosmetic is based in parts on its anti-inflammatory activities, which is superior when compared to those other well-known oils such as virgin avocado and Grapeseed oil. Raspberry seeds contain 83% essential fatty acids. A blend of raspberry seed oil and black seed oil could be used in anti-inflammatory products.

Recent studies of raspberry seeds by Canadian researchers (Oomah et la 2000) show that the most abundant fatty acids found in raspberry are Linoleic, alpha linolenic and oleic acids. The composition of omega-3 and omega-6 fatty acids is one that research shows reduces the effects of oxidative stress in skin. The oil has a robust color, mild raspberry flavor, aroma and active properties. This is a very stable oil and is an incredible free radical scavenger.

In addition to abundant fatty acids, raspberry extract is a very rich source of alpha-tocopherol (E-306) and gamma-tocopherol (E308). This tocopherol or Vitamin E rich composition has a well known function in skin repair and conditioning, which is related to antioxidant properties.

Raspberries have been shown to inhibit the production of COX-I and COX-II Enzymes. Anti inflammatory products like ibuprofen and aspirin, inhibit COX-I and COX-II resulting in the reduction of pain associated with arthritis, gout and other inflammatory conditions.

Fatty Acid Profile

			Range (%)
Fatty Acid Profile (Major Acids)	Palmitic	C16:0	2—5
	Palmitoleic	C16:1	<0.5
	Hexadecatetraenoic	C16:3	<0.5
	Heptadecenoic	C17:0	<0.5
	Stearic	C18:0	<3.0
	Oleic	C18:1	8—14
	Linoleic	C18:2	45—55
	Linolenic	C18:3	28—36
	Icosanoic	C20:0	<1.0
	Icosenoic	C20:1	<0.5
	Docosanoic	C22:0	<0.5
	Docosenoic	C22:1	<0.5

Summary

Raspberry seed oil is excellent for **sensitive skin** and is deeply **nourishing, softening, emollient, lubricating, conditioning**, a lipid barrier **providing protection to the skin** and provides **moisture retention** for the skin. This oil has **UV absorptive properties** in all three ranges beneficial for photoprotection.

Raspberry seed oil is known especially for its preventions of **gingivitis, rash, eczema and other skin lesions**. Its use as a cosmetic additive is based in parts on its **anti-inflammatory activities** which is superior when compared to those other well know oils such as virgin Avocado oil and Grapeseed oil.

Raspberry Seed Oil contains large quantities of gamma-tocopherol which has been shown to have **superior free- radical scavenging properties** when compared with alpha-tocopherol, **especially for nitrogen oxide radicals**.

Benefits

- Improved elasticity
- Lubricating
- Conditioning
- Skin Softening
- Emollient
- A lipid barrier providing protection to the skin and provides moisture retention for the skin UV absorptive in all three ranges.

Uses

- Massage Creams
- Hair Care
- Creams
- Lotions
- Balms
- Sun Care

Suggested Use Levels

Lotions and Creams 1—9%

Balms 2—10%

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