

Siberian Sea Buckthorn Berry Oil

Product Data Sheet (June 2019)



What Is It?

Extracted from the berries, leaves and seeds of the sea buckthorn plant (Hippophae rhamnoides), which is a small shrub that grows at high altitudes in the northwest Himalayan region, this oil may be applied to the skin or ingested.

Siberian Sea Buckthorn Berry Oil has been used for thousands of years in Eastern Europe, China and India as a natural remedy against various ailments and in home cosmetology.

The best places to grow this shrub are the Altai Republic in Russia and in several regions of Ukraine. NMPI partners with a particular garden located in an ecologically clean region of Ukraine that also provides high-quality Siberian Sea Buckthorn Berry Oil to Moscow officials and Russian cosmonauts. Four varieties of Hippophae rhamnoides are grown here: Dar Katun, Altai News, Golden Beginning, and Vitamin, which were brought from the Scientific Research Institute of Horticulture of Siberia.

Why Do You Use It In RELIEF!™ First Aid and Cosmetic Serums?

Nutrient-Rich

Sea buckthorn oil is rich in various vitamins, minerals and beneficial plant compounds. For instance, it is naturally full of antioxidants, which help protect your body against aging. What's more, its berries boast potassium, calcium, magnesium, iron and phosphorus. They also contain good amounts of folate, biotin and vitamins B1, B2, B6, C and E. More than half of the fat found in sea buckthorn oil is mono- and polyunsaturated fat, which are two types of healthy fats.

Skin Protection

Compounds in sea buckthorn oil may boost your skin health when applied directly. For instance, test-tube and animal studies show that the oil may help stimulate skin regeneration, helping wounds heal more quickly. Similarly, animal studies reveal that sea buckthorn oil may also help reduce inflammation following UV exposure, protecting skin against sun damage. Researchers believe that both of these effects may stem from sea buckthorn's omega-7 and omega-3 fat



content. In a seven-week study in 11 young men, a mix of sea buckthorn oil and water applied directly to the skin promoted skin elasticity better than a placebo. There's also some evidence that sea buckthorn oil may prevent skin dryness and help your skin heal from burns, frostbite and bedsores.

The addition of nanodiamond crystals into the Siberian Sea Buckthorn Berry Oil amplifies the natural benefits of the berry oil through adsorption which allows the oil molecules to penetrate into deeper layers of the affected area and improve the overall results. Users of RELIEF!™ First Aid may notice accelerated healing of the injury compared to conventional treatments as well as relief from inflammation and pain when used as directed.

Certification

We use food-grade Siberian Sea Buckthorn Berry Oil in both RELIEF!™ First Aid and RELIEF!™ Cosmetic serums. Copies of certificates are available by request.

References

"Effects of processing and of storage on the stability of pantothenic acid in sea buckthorn products (Hippophaë rhamnoides L. ssp. rhamnoides) assessed by stable isotope dilution assay." Gutzeit, D et al. Journal of Agricultural and Food Chemistry 2007 May 16;55(10):3978-84.

"Folate content in sea buckthorn berries and related products (Hippophaë rhamnoides L. ssp. rhamnoides): LC-MS/MS determination of folate vitamer stability influenced by processing and storage assessed by stable isotope dilution assay." Gutzeit, D et al. Journal of Analytical and Bioanalytical Chemistry 2008 May;391(1):211-9.

"Sea Buckthorn Oil—A Valuable Source for Cosmeceuticals (A Review)," Koskovac et al. Journal of Cosmetics 2017, 4(4), 40.

- " Hippophae Rhamnoides L. (Sea Buckthorn): a Potential Source of Nutraceuticals," Christaki, Efterpi. (2012) *Journal of Food and Public Health*. 2. 69-72.
- "Influence of sea buckthorn (Hippophae rhamnoides L.) flavone on dermal wound healing in rats." Gupta, A et al. Molecular and Cellular Biochemistry (An International Journal for Chemical Biology in Health and Disease) 2006 Oct;290(1-2):193-8
- " A poly-herbal formulation accelerates normal and impaired diabetic wound healing." Gupta, A. et al. Wound Repair and Regeneration (The International Journal of Tissue Repair and Regeneration), 2008 Nov-Dec;16(6):784-90
- " UV radiation-induced skin aging in hairless mice is effectively prevented by oral intake of sea buckthorn (Hippophae rhamnoides L.) fruit blend for 6 weeks through MMP suppression and increase of SOD activity." Hwang, IS, et al. International Journal of Molecular Medicine 2012 Aug;30(2):392-400



- " Abundance of active ingredients in sea-buckthorn oil," Zielińska, A. and Nowak, I., *Lipids in Health and Disease*, 2017; 16:95
- " Anti-Aging Effects of Hippophae rhamnoides Emulsion on Human Skin," Barkat, Ali & Naveed, Akhtar & Braga, Valdir., *Tropical Journal of Pharmaceutical Research* 2012 December 12(6)
- "Chapter 120 Sea Buckthorn (Hippophae rhamnoides L.) Seed Oil: Usage in Burns, Ulcers, and Mucosal Injuries," Asheesh Gupta and Nitin K.Upadhyay, Nuts and Seeds in Health and Disease Prevention, 2011
- "Safety and healing efficacy of Sea buckthorn (Hippophae rhamnoides L.) seed oil on burn wounds in rats." Upadhyay, NK et al. International Journal of Food and Chemical Toxicology. 2009 Jun;47(6):1146-53