

COPAIBA OIL



2 ounces: \$21.95

4 ounces: \$29.95

8 ounces: \$39.95

Copaiba oil contains a significant amount of kaurenoic acid, a diterpene plant chemical that has shown in laboratory studies to exert anti-inflammatory, hypotensive, and diuretic effects *in vivo* and antimicrobial, smooth muscle relaxant and cytotoxic actions *in vitro*.^{*} Copaiba is also the highest known plant source of another chemical named *caryophyllene*. Caryophyllene is a well known plant chemical which has been documented in laboratory studies with anti-inflammatory effects (among other actions).^{*} Many of copaiba's traditional uses and tested biological actions are attributed to these two chemicals. For more complete information on copaiba, please see the Raintree Nutrition internet website and the online [Topical Plant Database](#).

Traditional Uses:^{*} as a topical analgesic (pain-reliever) and anti-inflammatory for wounds, rashes, dermatitis, bug bites, boils, and psoriasis; as an antiseptic, disinfectant, and antimicrobial agent for internal and external bacterial infections; for nail and skin fungi; for skin cancer; for stomach ulcers and stomach cancer

Ingredients: 100% all natural copaiba resin (*Copaifera officinalis* and *Copaifera langsdorffii*).

Suggested Use: Take 30-60 drops (1-2 ml) twice daily. Apply directly to skin as desired.

Contraindications: Not to be used internally during pregnancy or while breast-feeding.

Drug Interactions: None reported.

Other Observations:

- Avoid contact with mucous membranes, as the resin can act as an irritant.
- Those sensitive or allergic to the resin may experience a measles-like rash accompanied by irritation, itching and/or tingling when using topically or taking internally. Discontinue use if these effects occur or cut with another oil.
- Do not take internally in large dosages (more than 5 ml). Large dosages have been reported to cause nausea, vomiting, fever, and rashes. Discontinue or reduce dosage if these effects occur.

Clinical Documentation and Research:^{*} This Raintree product has not been the subject of any clinical research. Available third-party documentation and research on copaiba can be found at the [Raintree website](#) or on [PubMed](#). A partial listing of published third-party research on copaiba is shown below:

Anti-inflammatory & Pain-relieving Actions:

Gomes, N. M., "Antinociceptive activity of Amazonian Copaiba oils." *J. Ethnopharmacol.* 2007 Feb; 109(3): 486-92.

Veiga Junior, V., et al. "The inhibition of paw oedema formation caused by the oil of *Copaifera multijuga* Hayne and its fractions." *J. Pharm. Pharmacol.* 2006; 58(10): 1405-10.

Paiva, L. A., et al. "Anti-inflammatory effect of kaurenoic acid, a diterpene from *Copaifera langsdorffii* on acetic acid-induced colitis in rats." *Vascul. Pharmacol.* 2002 Dec; 39(6):303-7.

Veiga, V. F., et al. "Phytochemical and antioedematogenic studies of commercial copaiba oils available in Brazil." *Phytother. Res.* 2001; 15(6): 476-80.

Ghelardini, C., et al. "Local anaesthetic activity of beta-caryophyllene." *Farmacol.* 2001; 56(5-7): 387-9.

Cascon, V., et al. "Characterization of the chemical composition of oleoresins of *Copaifera guianensis* Desf., *Copaifera duckei* Dwyer and *Copaifera multijuga* Hayne." *Phytochemistry.* 2000; 55(7): 773-78.

Basile, A. C., et al. "Anti-inflammatory activity of oleoresin from Brazilian *Copaifera*." *J. Ethnopharmacol.* 1988; 22: 101-9.

Fernandes, R. M., Contribuicao para o conhecimento do efito antiinflamatorio e analgesico do balsamo de copaiba e alguns de seus constituintes quimicos. Thesis, 1986. Federal University of Rio de Janeiro.

Cytotoxic & Anticancerous Actions:

Cavalcanti, B. C., et al. "Genotoxicity evaluation of kaurenoic acid, a bioactive diterpenoid present in Copaiba oil." *Food Chem. Toxicol.* 2006; 44(3): 388-92.

Krauchenco, S., et al. "Three-dimensional structure of an unusual Kunitz (STI) type trypsin inhibitor from *Copaifera langsdorffii*." *Biochimie*. 2004; 86(3): 167-72.

Lima, S. R., et al. "In vivo and in vitro studies on the anticancer activity of *Copaifera multijuga* Hayne and its fractions." *Phytother. Res.* 2003 Nov; 17(9): 1048-53.

Costa-Lotufo, L. V., et al. "The cytotoxic and embryotoxic effects of kaurenoic acid, a diterpene isolated from *Copaifera langsdorffii*." *Toxicol.* 2002; 40(8): 1231-34.

de Almeida Alves, T. M., et al. "Biological screening of Brazilian medicinal plants." *Mem. Inst. Oswaldo Cruz* 2000; 95(3): 367-73.

Ohsaki, A., et al. "The isolation and in vivo potent antitumor activity of clerodane diterpenoids from the oleoresin of Brazilian medicinal plant *Copaifera langsdorffii* Desfon." *Bioorg. Med. Chem. Lett.* 1994; 4: 2889-92.

Antimicrobial Actions:

Cotoras, M., et al. "Characterization of the antifungal activity on *Botrytis cinerea* of the natural diterpenoids kaurenoic acid and 3beta-hydroxy-kaurenoic acid." *J. Agric. Food Chem.* 2004 May; 52(10): 2821-6.

Sartori, M. R., et al. "Antifungal activity of fractions and two pure compounds of flowers from *Wedelia paludosa* (*Acmela brasiliensis*) (Asteraceae)." *Pharmazie*. 2003; 58(8): 567-9.

Tincusi, B. M., et al. "Antimicrobial terpenoids from the oleoresin of the Peruvian medicinal plant *Copaifera paupera*." *Planta Med.* 2002; 68(9): 808-12.

Wilkins, M., et al. "Characterization of the bactericidal activity of the natural diterpene kaurenoic acid." *Planta Med.* 2002 68(5): 452-54.

Yang, D., et al. "Use of caryophyllene oxide as an antifungal agent in an in vitro experimental model of onychomycosis." *Mycopathologia*. 1999; 148(2): 79-82.

Davino, S. C., et al. "Antimicrobial activity of kaurenoic acid derivatives substituted on carbon-15." *Braz. J. Med. Biol. Res.* 1989; 22(9): 1127-29.

Maruzzella, J. C., et al. "Antibacterial activity of essential oil vapors." *J. Am. Pharm. Assoc.* 1960; 49: 692-94.

Anti-spasmodic & Muscle-Relaxant Actions:

Tirapelli, C. R., et al. "Pharmacological comparison of the vasorelaxant action displayed by kaurenoic acid and pimaradienoic acid." *J. Pharm. Pharmacol.* 2005; 57(8): 997-1004.

Ambrosio, S. R., et al. "Role of the carboxylic group in the antispasmodic and vasorelaxant action displayed by kaurenoic acid." *J. Pharm. Pharmacol.* 2004; 56(11): 1407-13.

Tirapelli, C. R., et al. "Analysis of the mechanisms underlying the vasorelaxant action of kaurenoic acid in the isolated rat aorta." *Eur. J. Pharmacol.* 2004 May; 492(2-3): 233-41.

de Alencar, et al. "Smooth muscle relaxant effect of kaurenoic acid, a diterpene from *Copaifera langsdorffii* on rat uterus in vitro." *Phytother. Res.* 2003; 17(4): 320-4.

Cellular Protective, Anti-ulcer & Wound Healing Actions:

Cho, J. Y., et al. "Amelioration of dextran sulfate sodium-induced colitis in mice by oral administration of beta-caryophyllene, a sesquiterpene." *Life Sci.* 2006 Nov 29;

Chang, H. J., et al. "Quantitative structure-activity relationship (QSAR) for neuroprotective activity of terpenoids." *Life Sci.* 2006 Nov 10;

de Araujo, F. A., et al. "Copaiba oil effect on aminotransferases of rats with hepatic ischemia and reperfusion with and without ischemic preconditioning." *Acta Cir. Bras.* 2005 Jan-Feb; 20(1): 93-9.

Brito, M. V., et al. "Copaiba oil effect on urea and creatinine serum levels in rats submitted to kidney ischemia and reperfusion syndrome" *Acta Cir. Bras.* 2005 May-Jun; 20(3): 243-6

Paiva, L. A., et al. "Attenuation of ischemia/reperfusion-induced intestinal injury by oleo-resin from *Copaifera langsdorffii* in rats." *Life Sci.* 2004 Sep 3; 75(16): 1979-87.

Paiva, L. A., et al. "Protective effect of *Copaifera langsdorffii* oleo-resin against acetic acid-induced colitis in rats." *J. Ethnopharmacol.* 2004 Jul; 93(1): 51-6.

Paiva, L. A., et al. "Investigation on the wound healing activity of oleo-resin from *Copaifera langsdorffii* in rats." *Phytother. Res.* 2002; 16(8): 737-39.

Paiva, L. A., et al. "Gastroprotective effect of *Copifera langsdorffii* oleo-resin on experimental gastric ulcer models in rats." *J. Ethnopharmacol.* 1998; 62(1): 73-8.

Tambe, Y., et al. "Gastric cytoprotection of the non-steroidal anti-inflammatory sesquiterpene, beta-caryophyllene." *Planta Med.* 1996; 62(5): 469–70.

Insecticidal Actions:

de Mendonca, F. A., et al. "Activities of some Brazilian plants against larvae of the mosquito *Aedes aegypti*." *Fitoterapia.* 2005 Dec; 76(7-8): 629-36.

This product is sold through health practitioners, retail stores and [Raintree Nutrition](#). Please contact a health professional concerning other observations and/or effects of this product and/or if you have any disease, condition, or illness for which you are seeking treatment or products for.

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*The statements contained herein have not been evaluated by the Food and Drug Administration.
This product is not intended to treat, cure, or prevent any disease.