# Peru Balsam Essential Oil Health and Beauty Benefits

Peru balsam, which is also known and marketed by many other names, is a resinous substance extracted from a species of trees known as *Myroxylon balsamum* or *Myroxylon pereirae* (Santos mahogany), in the family *Fabaceae*. The tree is native to tropical forests from Southern Mexico through the Amazon regions of Peru and Brazil at elevations of 200–690 meters. The trees bear evergreen leaves and white flowers, and grow in well–drained soil in humid forests; the species is endemic of El Salvador.

Alternate names by which it may be listed are balsam Peru, Peru balsam, Peruvian balsam, black balsam, quina, tolu, balsam fir oil, balsamo, China oil, Honduras balsam, Indian balsam, Surinam balsam, balsam, balsam of Peru, bálsamo del Perú (Spanish), balsamo blanco (Spanish), balsamum Peruvianim (Latin), Perubalsambaum (Latin), baume du Pérou (French), baume Péruvien (French), baume de San Salvador (French), baumier du Perou (French), Myrospermum pereirae, Myroxylon balsamum var. pereirae and Myroxylon pereirae, Toluifera pereirae.

## HARVESTING AND PROCESSING

Crude Peru balsam is obtained by removing the bark of the *Myroxylon balsamum* tree and scorching the exposed wood. Crude Tolu balsam is obtained from the same tree, but differs from Peru balsam because it is extracted from the tree by making a V—shaped cut through the bark and underlying wood. Rags are wrapped around the tree to soak up the resin after strips of bark are removed from the trunk; the rags are later boiled to extract the balsam by letting the resin dilute in the water. Crude Peru balsam is a dark brown, thick oily liquid with an aromatic scent.

A resin—free essential oil is obtained from the crude balsam by high vacuum dry distillation. Another method of extraction is the solvent extraction of the resin. Peru balsam essential oil is a pale to medium amber or brown viscous liquid with a unique, rich, warm, sweet, balsamic aroma similar to that of cinnamon and vanilla, and a bitter taste. It blends well with essential oils of clove, cinnamon, vanilla, Patchouli, Petitgrain, rose, sandalwood, lavender, lemongrass, and ylang ylang. There is also a wood oil that is naturally resistant to insects, which is produced from the wood chippings and is considered of inferior quality.

Peru balsam essential oil contains about 25 different substances, including *cinnamein*, *cinnamic* acid, *cinnamyl cinnamate*, *benzyl benzoate*, *benzoic* acid, and *vanillin*. It also contains *cinnamyl* alcohol, *cinnamaldehyde*, *farnesol*, and *nerolidol*. Approximately 30–40% of it contains resins or *esters* (chemical compounds derived from acids) of unknown composition.

#### THREE DIFFERENT TYPES

Peru Balsam (or Tolu Balsam) Essential Oil	Copaiba Balsam Essential Oil	Balsam Fir Essential Oil
Is obtained from Myroxylon balsamum, a tree native to South and Central America. Because of its mixed aroma of vanilla, cinnamon, and cloves, it is used to flavor foods and to serve as a perfume base for cosmetic and toiletry products. Peru balsam essential oil has antioxidants that fight free	Is extracted from the trees of the <i>Copaifera</i> family, which are native to South America. The oil has a mild, sweet, and woody scent. It has many health benefits, due to its content of organic chemical compounds called <i>diturpenes</i> and <i>sesquiturpenes</i> , and hardly any side effects. The degree of	Is obtained from Abies balsamea, which is mostly grown in North America and Canada in cool climates. The tree has uses not only as a Christmas tree, but also as a source of a cancer fighting compound called abieslactone. The light, grassy—scented

radicals and reduce	benefits, however, depends on	essential oil is extracted from
inflammation. It is also a strong	the tree from which the balsam	the fir needles and the twigs.
antimicrobial agent. However,	is derived.	
this balsam is also a potent		
allergen.		

# THE HISTORY OF PERU BALSAM ESSENTIAL OIL

The name *Peru balsam* is a misnomer. In the early period of Spanish invasion in Central and South America, the balsam was collected almost exclusively from El Salvador in Central America and shipped to Callao (the port of Lima) in Peru, from there it was shipped onward to Europe. It acquired the name of "Peru" because this was its shipping port of origin. Its export to Europe was first documented in the 17 Century, in the German *Pharmacopeia*.

The Indigenous peoples of Central and South America used to apply copaiba balsam to the navels of newborns as a *styptic* (to stop bleeding), and on the battle wounds of warriors to promote wound healing. A use that likely originated when they observed wounded animals honing their bodies against the trunks of copaiba trees. They also used the resin to increase urination and as an anthelmintic (to expel intestinal worms).

In their native lands, the Peru, copaiba, and fir balsams have had many uses in folk medicine, from healing wounds to detoxing the body by functioning as a diuretic. Some of these benefits have been clinically proven—such as, healing wounds, reducing inflammation, treating cancer, fighting infections, curing skin conditions like scabies or acne, and preventing gastric ulcers. The essential oils of these balsams also offer similar benefits, though the efficiency depends on the purity of the oil. Some of these benefits have been supported by clinical research, especially for copaiba balsam essential oil. Some of these are based on anecdotal evidences of use in traditional and folk medicine.

As far back as 1907, Peru balsam essential oil was used to treat scabies, a skin condition brought on by mites (microscopic parasites which burrow in the skin and result in rashes), which mostly affected soldiers. The balsam, mixed with vegetable glycerine, was applied topically on the skin and it effectively reduced itching, sometimes within a day. This efficacy was due to the oil's ability to kill off the parent mite quickly (within a few hours) before it could produce offspring and create an infestation. Traditional medicine also documents its use for relief from sore, cracked nipples, chilblains (or *pernio*, small patches of inflamed skin that form on fingers or toes from exposure to very cold, but not freezing, air), and hemorrhoids.

Today Peru balsam essential oil is extracted under a handicraft process, and is mainly exported from El Salvador. Another balsam, balsam of Tolu or Tolu balsam, similar to Peru balsam, originates from South America, but is extracted from Myroxylon balsamum var. balsamum through a different process. Peru balsam essential oil is in a number of pharmaceutical preparations and plays an important role in perfumes. Peru balsam essential oil should never be swallowed.

## MODERN USES OF PERU BALSAM ESSENTIAL OIL

Peru balsam essential oil is used in food and drink for flavor, in perfumes and toiletries for fragrance, and in medicine and pharmaceutical items for its healing properties. In some instances, Peru balsam essential oil is listed on the ingredient label of a product by any one of its various names, but listing may not be required based on mandatory labeling conventions (in fragrances, for example, it may simply be listed under a generic term like "fragrance"). Peru balsam essential oil has four primary modern uses.

## 1. Flavoring in food and drink.

- Caffeinated—coffee, flavored tea.
- Alcoholic—wine, beer, gin, liqueurs, apéritifs (e.g. vermouth, bitters).
- Soft drinks, including cola.
- Juice.
- Citrus—citrus fruit peel, marmalades.
- Tomatoes—tomato-containing products, Mexican and Italian foods with red sauces, ketchup.
- Spices—cloves, Jamaica pepper (allspice), cinnamon, nutmeg, paprika, curry, anise, ginger.
- Sauces—chili sauce, barbecue sauce, chutneys.
- Pickled vegetables—pickles.
- Sweets—chocolate, vanilla, baked goods and pastries, pudding, ice cream, chewing gum, candy.

## 2. Fragrance in **perfumes and toiletries**.

 Perfumes, colognes, deodorants, soaps, shampoos, conditioners, after—shave lotions, cosmetics, lipsticks, creams, lotions, ointments, baby powders, sunscreens, suntan lotions.

## 3. Medicinal products.

- Over—the—counter (OTC) products, hemorrhoid suppositories and ointment, cough medicine or suppressants and lozenges, diaper rash ointments, oral and lip ointments, tincture of benzoin (benzoin resin in ethanol, a similar preparation to Friar's Balsam or Compound Benzoin Tincture), wound spray (it has been reported to inhibit Mycobacterium tuberculosis, the pathogenic bacteria that causes tuberculosis, as well as the common ulcer—causing bacteria H. pylori found in the stomach, in test—tube studies), calamine lotion and surgical dressings.
- Dentistry—dental cement, eugenol (chemical compound, aromatic oily liquid extracted from certain essential oils) used by dentists, some periodontal impression materials, and in the treatment of "dry socket" (or alveolar osteitis, inflammation of the bone, which usually occurs as a complication of tooth extraction).

## 4. Optical properties.

 As a glue, typically as a mounting medium for microscope specimens due to purified Peru balsam's transparency and refractive index (a number that indicates light bending ability) of 1.597 being very close to that of many glasses used in optics.

It also can be found in toothpaste, mouthwash, scented tobacco, cleaning products, pesticides, insect repellants, air fresheners and deodorizers, scented candles, and oil paint.

# THE HEALTH BENEFITS PERU BALSAM ESSENTIAL OIL

Peru balsam essential oil i has a <u>diverse range of medicinal effects</u>. The most notable include reduced inflammation, prevention of infection, wound healing, a healthy respiratory system, skin care, oral health, and hemorrhoid treatment. This is probably not the most widely known or used essential oil, as it is not globally exported on a level equivalent to more popular essential oils. However, it is very potent and <u>has an impressive range of health benefits</u>.

The health and beauty benefits of Peru balsam essential oil can be attributed to its antioxidant, analgesic, anthelmintic, antibacterial, fungicidal, anti–inflammatory, antiseptic, antitussive (cough suppressant), diuretic, cicatrizing (wound healing), expectorant, parasiticidal and stimulant (promotes the growth of epithelial cells) properties.

Even now, Peru balsam essential oil is used in topical medicines for scabies, diaper and other rashes of the skin, eczema, anal itching, and hemorrhoid suppositories. However, the chances of this balsamic

essential oil causing skin allergies is considerably high. So don't apply it without asking your doctor first or without doing a 24–hour patch test. Copaiba balsam essential oil is safer to use in this regard as it has the same antimicrobial effect but will not trigger allergies.

#### 1. Powerful Antioxidant

This may not be the most powerful aspect of Peru balsam essential oil's medicinal effects, but <u>research</u> <u>indicates</u> that the oil can stimulate the immune system's defense mechanisms to eliminate free radicals throughout the body. This can help in preventing the development of chronic diseases, like cancer.

## 2. Antiaging

Peru balsam essential oil has effective antiaging qualities due to its antioxidant content. Among the active components of the oil is *vanillin*, which is a powerful antioxidant that can protect you from free radicals. UV rays can cause damage to your skin cells, resulting in fine lines, wrinkles and sun spots. The antioxidants in this essential oil act as a shield that safeguards the skin. Keeping your skin looking youthful and lowering your risk of skin cancer.

## 3. Antiseptic and Antibacterial

The active ingredients in Peru balsam essential oil are associated with the removal of bacteria and germs, cleansing areas which may be prone to infection. Applying this oil on the skin forms a safety barrier on the body's largest organ. This is why traditionally Peru balsam essential oil's most popular use was for the treatment and prevention of scabies, which are brought on by mites.

#### 4. Prevents Infections

While both Peru balsam and cobaipa balsam essential oils can prevent infestation from mosquitoes and fleas, protecting you from insect—borne illnesses, balsam fir essential oil is effective against *Staphylococcus auerus* (Staph), a bacteria that causes numerous infections like pneumonia, and bone and joint infections.

## 5. Improves Symptoms of Rheumatism

Rheumatism is a general term used to describe swelling and pain in the joints and muscles. The most common form is rheumatoid arthritis, which is a long—term autoimmune disorder that results in warm, swollen, stiff and painful joints in the wrist and hands. A condition that stems from a variety of factors, mainly a weakened immune system and rising levels of toxins in the body.

Toxins such as uric acid, kept in the body accumulate in body parts like muscles, joints and the nervous system causing inflammation. Common signs of rheumatism are redness and swelling of joints, soreness of muscles, abnormal blood flow, insomnia and fatigue.

The diuretic, anti–rheumatic and analgesic properties of Peru balsam essential oil enhance blood circulation and reduce swelling through the elimination of toxins, excess fluid, salt and uric acid through urination.

## 6. Wound Healing

The chemical compounds of Peru balsam essential oil are found to have an anti–microbial properties. When applied topically, the oil forms a protective layer. In an experiment on lab rats, copaiba balsam hastened healing. By day 9, rats with open wounds given copaiba balsam treatment showed 84% wound contraction compared to 51% wound contraction in the control group.

In case of incisions or surgical wounds, the tensile strength of the wound—that is its ability to withstand any external load—became double by day 5 in rats treated with copaiba balsam. This wound—healing property is likely attributed to the antibacterial and anti–inflammatory agents in the balsam.

#### 7. Skin Health

Copaiba balsam essential oil has been proven beneficial for people with skin problems. Applying the oil on your skin can treat blisters, sun spots, acne marks and pimples—particularly for skin that's prone to acne. As one study found, copaiba balsam oil can reduce the redness, skin thickness, and scaliness associated with psoriasis by inhibiting the production of inflammation—causing immune agents in the body.

It also speeds healing and reduces the appearance of scars. Copaiba balsam essential oil also contains antioxidants that eliminate free radicals, reducing wrinkles and giving you younger looking skin. Some even suggest that it can fade stretch marks and treat varicose veins.

#### 8. Gastrointestinal Function

In Brazil, copaiba balsam essential oil is considered a potent remedy for gastric problems. Indeed, a study has found that the balsam essential oil from *Copaifera langsdorffii* could prevent gastric damage in rats caused by ethanol (a constituent of alcohol) and artificially induced stress. It could even cure lesions in the stomach caused by side effects from medication. In some rats with an impaired digestive system, it reduced total stomach acidity without hindering digestion. Copaiba balsam essential oil shows a therapeutic effect even in cases of colitis.

Indigestion is caused by improper metabolic function, absorption and elimination. Indigestion frequently ends up in sluggishness, nausea, constipation and flatulence, among other digestive complaints. Peru balsam essential oil can improve digestive functions. Breathing in the warm aroma of Peru balsam essential oil particularly before meals might help in stimulating appetite and bowel motion, easing constipation and promoting proper digestion.

### 9. Upper Respiratory Tract

Peru balsam essential oil was <u>traditionally used to treat chest congestion and loosen mucous</u>, and today, Peru balsam essential oil is still used in cough syrups, expectorants and inhalants. An 1839 *Journal of Medicine* in London records the "excellent effects" of copaiba balsam essential oil in the treatment of chronic bronchitis. Both copaiba balsam and fir balsam are said to loosen mucous and help to expel it clearing the airways. The expectorant property of Peru balsam essential oil is used to <u>clear out the respiratory tract</u> when congested with phlegm. Aromatherapy uses the diffused form of this oil to treat respiratory infections.

Due to its antibacterial properties, it will kill bacteria in the air, especially when combined with other essential oils like tea tree and eucalyptus.

# **10.** Reduces Anxiety and Stress

Peru balsam essential oil has a therapeutic effect on anxiety and depression. Copaiba balsam essential oil has been shown to improve symptoms of depression and anxiety in animal studies without affecting other activities. This effect could be attributed to the chemical compound *beta–caryophyllene*. It is best to diffuse the aroma of these oils using a vaporizer.

A session of <u>aromatherapy inhalation allows Peru balsam essential oil</u> to stimulate hormonal shifts and reduce the stress hormones in your system, thereby enabling the body a break from a constant exhausting state of stress.

#### 11. Reduces Inflammation

Copaiba balsam essential oil can be applied topically for relief from joint pain. This oil as well as Peru balsam essential oil have anti–inflammatory properties that have a therapeutic effect on inflammation and pain, even in cases of chronic illnesses like rheumatism. It may even help with migraines and fibromyalgia. This therapeutic effect is attributable to the organic compound *beta–caryophyllene*, which is known to help ease inflammation, pain, atherosclerosis and osteoporosis.

The anti–inflammatory qualities of Peru balsam essential oil are numerous, ranging from topical application on wounds and aching joints to internal use to lower blood pressure and improve heart health. The <a href="mailto:anti-inflammatory nature of Peru balsam essential oil">anti-inflammatory nature of Peru balsam essential oil</a> may be its most adaptable trait. This is particularly important for people who suffer from hemorrhoids, as this is a popular cure for that condition.

## 12. Urinary Tract Infections and Gonorrhea

Traditional uses of copaiba balsam essential oil include treatment of bladder infections, urinary tract infections (UTIs), urinary incontinence (bedwetting), and gonorrhea. Apparently, in 1859, Great Britain imported 151,000 pounds of copaiba balsam essential oil, intended mostly to treat gonorrhea. The treatment consisted of taking copaiba balsam essential oil orally 3 times a day, which would stop the thick genital discharge. However, because it was taken alone it caused stomach irritation.

#### 13. Tumor and Cancer Cell Growth

Balsam fir essential oil contains a phytochemical (plant chemical) known as *abieslactone*, which controls the growth of certain tumor and cancer cells like liver and breast cancer. It also contains a chemical compound called *alpha-humulene*, which is toxic to tumor cells.

In one study, in mice with skin cancer using copaiba balsam essential oil slowed tumor growth by 58% and reduced tumor size by 76%. In the same study, the cancer had metastasized in the lungs, resulting in lung nodules. The copaiba balsam essential oil reduced these by 47%. When used at a higher dose in another study in mice with uterine and cervical cancer, copaiba balsam essential oil appeared to stimulate cancer growth. More research is required to determine the correct dosage.

## 14. Diuretic in Nature

The diuretic property of Peru balsam essential oil helps the body to <u>eliminate and flush out toxins</u>, <u>waste</u>, <u>and excess water and fat</u>. By stimulating regular urination, Peru balsam essential oil ensures proper kidney function and optimal health.

#### 15. Hair Care

A mixture of Peru balsam essential oil with water acts as a <u>cleanser for the scalp</u> by removing and cleaning dead skin cells, preventing the further development of dandruff. With regular use, the oil will also nourish the hair follicles and <u>makes hair stronger</u>.

#### 16. Dental Care

Due to its pleasant fragrance and taste, as well as its antibacterial, anti-microbial, and antiseptic properties, Peru balsam essential oil is a preferred ingredient in <u>dental hygiene products</u>. It can help <u>eliminate dangerous bacteria and infections</u> from the teeth and gums.

## THERAPEUTIC USES OF PERU BALSAM ESSENTIAL OIL

Peru balsam essential oil is commonly used as a fixative and fragrance component in soaps, detergents, creams, lotions and perfumes. One of the most valued properties of Peru balsam essential oil is that it stimulates blood circulation and is a powerful expectorant.

There are many uses of Peru balsam essential oil due to its many beneficial properties. As with most essential oils, Peru balsam can either be diffused or applied topically, but this essential oil's pleasant scent makes it a favorite for diffusion in aromatherapy mixtures. It is also commonly used as a flavoring agent in dishes.

- Treat Scabies, Ringworm and Head Lice: Using Peru balsam essential oil in low dilution fights bacterial, fungal and parasitic infections. Add 2–3 drops of this essential oil to extra virgin olive oil or other carrier oil and massage it on the affected areas. Apply it directly on places where you can view the burrows of the mites. With frequent use the signs of scabies will improve. In a similar manner, the same mixture can be applied on eczema lesions.
- Treat Eczema and Pruritus (Itch): Using Peru balsam essential oil in low dilution. Add 2–3 drops
  of this essential oil to extra virgin olive oil or other carrier oil and massage it on the affected
  areas.
- **Disinfectant:** Peru balsam essential oil is used as an antibacterial and antifungal agent in both traditional and modern medicine. Pour a few drops of this essential oil in a vaporizer and spray your room to disinfect the air.
- **Venous Leg Ulcer:** Leg sores caused by weak blood circulation. Dilute about 2–3 drops of Peru balsam essential oil in approximately 100 ml of a carrier oil. Massage sores with this mixture. It will offer relief in just a few hours. Use this home remedy twice a day.
- Wound Healing: It can be used as an antiseptic to heal cuts, rashes, ulcers, bruises, burns, frostbite and open wounds, as a styptic for minor bleeding. Clean the wound and apply copaiba essential oil directly to it.
- **Treat Acne:** Rejuvenates dry and chapped skin as well as treating other skin conditions. Soothes bedsores (pressure ulcers) and sore nipples. Apply a few drops directly on the skin.
- Improve Digestion: Rub lower abdomen with a mixture of 2 drops of Peru balsam and 2 drops of nutmeg essential oils diluted in 2 ml of sesame oil supports digestive function. Or, add 2 drops of Peru balsam essential oil to your diffuser and inhale before meals.
- For Upper Respiratory Congestion: Add 3–4 drops of Peru balsam essential oil in a diffuser and let its aroma permeate the air. Or, pour a few drops of copaiba or balsam fir essential oils in hot water for steam inhalation. Its sweet cinnamon–vanilla fragrance helps one breathe effortlessly. After a couple of minutes, gargle with warm salt water, to loosen the phlegm. This remedy also eases inflammation in the nose and throat.
- Alleviates Anxiety And Stress: Add 3–4 drops of Peru balsam essential oil in a diffuser and let its aroma permeate the air.
- Hair Care: Reduces the development of dandruff.
- Reduce Inflammation: Eases symptoms of rheumatism and hemorrhoids, reduces inflammation.
- Slow Cancer Cell Growth.

#### **BUYING AND STORAGE**

Peru balsam essential oil can be obtained using various methods. However, the steam distillation method produces the purest organic essential oil that most resembles the chemical composition found in the resin. For optimum health benefits, opt for 100% pure, organic essential oil. It should be sold in a dark glass bottle and should be stored in a cool dark place away from heat and sunlight.

## ALLERGEN WARNING

A number of national and international surveys have identified Peru balsam essential oil as being in the "top five" allergens most commonly causing patch test reactions in people referred to dermatology clinics. A study in 2001 found that 3.8% of the general population patch tested was allergic to it. Many food flavorings and perfumes contain components identical to Peru balsam essential oil.

People allergic to Peru balsam essential oil or chemically–related substances may experience inflammation, redness, swelling, soreness, itching, and blisters, including allergic contact dermatitis (chronic inflammation of the skin caused by exposure to chemical agents), stomatitis (inflammation and soreness of the mouth or tongue), cheilitis (inflammation, rash, or painful erosion of the lips, oropharyngeal mucosa, or angles of the mouth), pruritus (itch), hand eczema (of the palms and soles), generalized plantar dermatitis (inflammation of the skin), rhinitis (irritation and inflammation of the mucous membrane inside the nose), and conjunctivitis (or pink eye, is the inflammation of the white part of the eye and the inner surface of the eyelid).

To diagnose a possible allergy a positive patch test is required. Positive patch test results indicate the patient has an intolerance to certain added flavors, fragrances and medications. Among foods, the most common are spices, citrus and tomatoes. In a case study in Switzerland, a woman who was allergic to Peru balsam essential oil developed an allergic reaction to her boyfriend's semen following intercourse after he drank large amounts of Coca–Cola.

Before 1977, the recommended marker for perfume allergy (a condition wherein people exhibit allergic reactions to ingredients in perfumes fragrances) was Peru balsam essential oil, still advised today. The presence of Peru balsam in a cosmetic is denoted by the <a href="International Nomenclature of Cosmetic Ingredients">International Nomenclature of Cosmetic Ingredients</a> (INCI) under the term *Myroxylon pereirae*.

Due to allergic reactions, since 1982 crude Peru balsam resin has been banned by the International Fragrance Association (IFRA) from use as a fragrance compound, but extracts and distillates are still used up to a maximum level of 0.4%, and are not required mandatory labeling. In March 2006, the European Commission (EC), Health and Consumer Protection Directorate—General (DG), Scientific Committee on Consumer Products (SCCS), issued an opinion on Peru balsam confirming that crude Peru balsam resin should not be used as a fragrance ingredient, because of a wide variety of test results on its sensitizing potential, but that extracts and distillates can be used up to a maximum level of 0.4%.

## **PRECAUTIONS**

Peru balsam essential oil has a long—standing reputation as an allergen, especially in babies and young children. It can trigger an allergic reaction known as contact dermatitis. Always <u>do a patch test prior to use</u>. Avoid use of this essential oil if your skin is sensitive. Balsam fir and copaiba balsam essential oils, are not known to cause this allergic reaction. But to err on the safe side, do a patch test prior to use anyway.

Peru balsam essential oil is likely safe in the small amounts used as a flavoring in some foods. This essential oil is likely unsafe to take by mouth as a medicine because it can damage the kidneys and might worsen existing kidney disease. Peru balsam essential oil is possibly safe when used on the skin over a short period of time (less than one week) and diluted in a carrier oil, used longer or in its pure form it can cause allergic skin reactions.

Peru balsam essential oil is likely unsafe to take by mouth during pregnancy or when breast–feeding. This essential oil is possibly unsafe to apply to the skin during breast–feeding. If it gets on the nipple, the nursing infant might be poisoned. There isn't enough reliable information to know if Peru balsam essential oil is safe to apply to the skin when pregnant. Stay on the safe side and avoid use.

## RECOMMENDED DOSAGE

Peru balsam essential oil has been used on the skin in 5%–20% formulations for wounds and burns. Use topically in diluted form. Case reports and small clinical studies report the effectiveness of Peru balsam essential oil combined with other ingredients in the management of certain wounds; however, there isn't much information on the safe dosage and interactions of this essential oil.

The appropriate dose of Peru balsam essential oil depends on several factors such as user's age, health and other medical conditions. Follow relevant directions on product labels and consult your physician before using.

https://youtu.be/9G2uG3c4W2U