

# PAIN RELIEF



Information for **Health Care Professionals**

## MUSCLE PAIN & STIFFNESS • BRUISING SWELLING FROM INJURIES

For centuries, *Arnica montana*, commonly called a mountain daisy, has been known for its vulnerary action, but the concentrated plant extracts are unsafe for internal use. Highly diluted homeopathic preparations of *Arnica montana*, however, are considered safe when used as directed.

Helénalin, the plant's main active component, interferes with the regulation of genes coding for many inflammatory mediators at a **very low cytosol concentration**. Swelling and pain from inflammation are therefore reduced. Among other components, polysaccharides stimulate phagocytosis and reduce bruising.

Arnicare® topicals use the homeopathic tincture in concentrations that allow for relief of **local pain, swelling, and bruising from injuries and surgical trauma**. Arnicare also **relieves muscle aches from overexertion**.

Thanks to its unique mode of action and variety of preparations, Arnicare is the **#1 homeopathic topical analgesic** recommended by U.S. pharmacists to reduce muscle and joint pain, swelling, and bruising.<sup>1</sup>

This medicine is available over the counter and health care professionals can also purchase direct from Boiron.

  
**BOIRON**<sup>®</sup>  
World Leader in  
Homeopathic Medicines  
[BoironUSA.com/hcp](http://BoironUSA.com/hcp)

## PAIN RELIEF <sup>2-5</sup>

## HOW IT WORKS

## ADVANTAGES

## SIDE EFFECTS/ DISADVANTAGES

### MEDICINES

<b>Arnicare® topicals</b> <i>(Arnica montana, leopard's bane, or mountain tobacco)</i>	Decreases local pain, swelling, and bruising associated with injuries or surgical trauma; reduces muscle aches from overexertion.	Fragrance-free; presented in different forms (gel, cream, or ointment).	Should not be applied to open damaged skin or mucous membranes; do not use if you are allergic to Arnica.
<b>Acetaminophen</b>	Analgesic.	Well-tolerated; fast-acting.	Internal use only; overdosing induces liver toxicity; interacts with other hepatotoxic drugs; use with care in patients with impaired kidney function; may mask other symptoms and delay treatment.
<b>Aspirin and salicylates</b>	Analgesic; antipyretic; anti-inflammatory.	Effective for mild pain and inflammation; fast-acting.	Increases bleeding time; irritates gastric mucosa; risk of Reye's syndrome in children with viral infections.
<b>Capsaicin</b>	Local analgesic by depletion of presynaptic substance P.	No counterirritant effect.	External use only; stinging or burning feeling maybe experienced locally; delayed action.
<b>Diclofenac (Voltaren®)</b>	Local analgesic; anti-inflammatory.	Quick action on inflammation, pain, and swelling.	Interacts with many other drugs; risk of skin irritation and other systemic side effects.
<b>Ibuprofen and other NSAIDs</b>	Analgesic; anti-inflammatory.	Relieves pain and inflammation; fast-acting.	Produces gastrointestinal disturbances; frequent side effects; interacts with other medications.
<b>Menthol, camphor, methyl salicylates and other counterirritants</b>	Local analgesics.	Long historical use; well-tolerated.	External use only; strong medicinal odor; no effect on deep muscles.



## ACTIVE COMPOUNDS

**Sesquiterpenes lactones:** esters of helenalin and 11, 13-dihydrohelenalin with short-chain fatty acids

**Volatile oils:** thymol, thymol esters, free fatty acids

**Polysaccharides with 65% to 100% galacturonic acid;** caffeic acid derivatives: chlorogenic acid; 1, 5-dicaffeoyl quinic acid

**Flavonoids:** flavone and flavonol glycosides and their aglycones<sup>6</sup>

## ANALGESIC EFFECTS

Arnica preparations have mild analgesic properties due to the action of helenalin and dihydrohelenalin.<sup>6</sup>

## ANTI-INFLAMMATORY EFFECTS

Micro-molecular concentrations (as low as  $10^{-20}$   $\mu\text{M}$ ) of helenalin inhibit the activation of transcription factors: NF- $\kappa\text{B}$  (transcription factor nuclear kappa-B) and NF-AT (nuclear factor of activated T-cells). NF- $\kappa\text{B}$  is a central mediator of the human immune system that regulates the activation of immunomodulatory genes. These are genes for cell adhesion molecules, immunoreceptors, inflammatory cytokines and enzymes such as cyclooxygenase II and iNO synthase. These proteins are involved in the inflammatory process and play a key role in immune defense.<sup>7-8</sup> The reduction in production of these various mediators of inflammation results in less pain and swelling.

## ANTI-ECCHYMOTIC EFFECT

Arnica's polysaccharides display marked phagocytosis enhancement in vivo, which could explain the rapid disappearance of bruising.<sup>9</sup>

## SAFETY INFORMATION

It is important to clearly distinguish the different preparations and concentrations of Arnica with regard to safety. Herbal extracts are concentrated, potentially irritating and unsafe for internal use. Topical forms contain various proportions of herbal extracts and are generally considered safe when used as directed. Boiron Arnicare® topicals must not be applied on mucous membranes or open wounds. To relieve pain or reduce bruising affecting large areas, use Arnicare Tablets for systemic action. Homeopathic preparations are highly diluted and are used internally for systemic action without safety issues.<sup>3-5</sup>

Rare cases of allergy to Arnica extracts have been reported. Typically, a rash appears within two hours, with itchiness and, in rare cases, blisters. Patients with allergic predisposition or a known allergy to plants of the daisy family (Compositae) should apply Arnicare on a small area (the size of a quarter) and wait two hours before using the topical on a larger area. The application of ice or a heating pad in the same area where Arnicare has been applied is not recommended.

**The Boiron Arnicare line should be used only for its labeled indications.**

## EACH FORM OF ARNICARE IS DESIGNED FOR SPECIFIC USES

For systemic action, extensive bruising or pain affecting large areas, use Arnicare Tablets or Arnica oral pellets.

These two medicines contain Arnica montana in safe homeopathic dilutions. Boiron Arnica pellets are available in dilutions of 6C, 12C, 30C, 6X, 30X, and 200CK, and Arnicare Tablets contain Arnica 9C. Arnica pellets and tablets complement the action of Arnicare topicals. As expected, one study demonstrated that homeopathic dilutions, such as Arnica 5C, have no significant effect on bleeding time and platelet aggregation.<sup>10</sup>



**Arnicare Tablets and Arnica Pellets**

## Arnicare CREAM

Light texture and suitable for massaging in when appropriate for:

- ✔ Post-surgical swelling and hematoma
- ✔ Painful joints (e.g., wrists, shoulders, or knees)
- ✔ Backaches

## Arnicare GEL

Non-greasy, cooling gel that is quickly absorbed for:

- ✔ Post-surgical swelling and hematoma
- ✔ Painful bumps and bruises
- ✔ Overexerted muscles
- ✔ Before, during, and after sports
- ✔ Physical therapy

## Arnicare OINTMENT

Thicker texture for:

- ✔ Sprains, stretched ligaments, and tendons

## References

1. *Pharmacy Times/US. News & World Report* 2021 OTC Survey of Pharmacists' OTC Recommendations. #1 Pharmacist Recommended Brand in the Homeopathic Topical Analgesics category: Arnicare Gel. Awarded July 2021.
2. Demarque D, Jouanny J, Poitevin B, Saint-Jean Y. *Pharmacology and Homeopathic Materia Medica*. 3rd ed. Sainte-Foy-lès-Lyon: CEDH; 2007.
3. Martindale W, Reynolds JEF. *Martindale: The Extra Pharmacopoeia*. London: Pharmaceutical Press; 1993.
4. *PDR for Herbal Medicines*. 3rd ed. Montvale, NJ: Thomson PDR; 2004.
5. *Drug Products Labeled as Homeopathic: Guidance for FDA Staff and Industry (revised draft)*. U.S. Food and Drug Administration. October 2019. Available at: <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/drug-products-labeled-homeopathic-guidance-fda-staff-and-industry>.
6. Wichtl M. *Arnicae flos. Herbal Drugs and Phytopharmaceuticals*. 3rd ed. Boca Raton, FL: CRC Press; 2004:54-59.
7. Lyss G, Schmidt TJ, Merfort I, Pahl HL. Helenalin, an anti-inflammatory sesquiterpene lactone from arnica, selectively inhibits transcription factor NF- $\kappa\text{B}$ . *Biological Chemistry*. 1997;378(9):951-961. doi:10.1515/bchm.1997.378.9.951.
8. Merfort I. Arnica: New insights on the molecular mode of action of a traditional medicinal plant (translated from German). *Forsch Komplementarmed Klass Naturheilkd*. 2003;10(1):45-48. doi:10.1159/000071692.
9. Puhlmann J, Zenk M, Wagnert H. Immunologically active polysaccharides of Arnica montana cell cultures. *Phytochemistry*. 1991;30(4):1141-1145. doi:10.1016/s0031-9422(00)95191-4
10. Baillargeon L, Drouin J, Desjardins L, Leroux D, Audet D. The effects of Arnica montana on blood coagulation. Randomized controlled trial. *Le Medecin de Famille Canadien*. 1993;39:2362-2367.



# Arnicare®



## GEL 1.5 oz, 2.6 oz, and 4.2 oz

### Drug Facts

Active ingredient	Purpose
Arnica montana..... 1X HPUS 7%	Relieves muscle pain & stiffness, swelling from injuries, discoloration from bruises

The letters "HPUS" indicate that the component in this product is officially monographed in the Homeopathic Pharmacopoeia of the United States.

#### Uses

- temporarily relieves muscle pain and stiffness due to:
  - minor injuries
  - overexertion
  - falls
- reduces symptoms of bruising such as:
  - pain
  - swelling
  - discoloration

#### Warnings

##### For external use only.

**Do not use** if you are allergic to Arnica montana or to any of this product's inactive ingredients.

##### When using this product

- avoid contact with eyes, mucous membranes, wounds, damaged or irritated skin
- use only as directed
- dryness or irritation may occur
- do not tightly wrap or bandage the treated area
- do not apply heat or ice to the treated area immediately before or after use.

##### Stop use and ask a doctor if

- condition persists for more than 3 days or worsens
- symptoms clear up and occur again within a few days.

**Keep out of reach of children.** If swallowed, get medical help or contact a Poison Control Center right away.

**Directions** Apply a thin layer of Arnicare Gel to affected area as soon as possible after minor injury. Repeat 3 times a day or as needed. If heat or ice is applied, wait 5 minutes before applying Arnicare Gel.

**Other information** do not use if glued carton end flaps are open or if the tube seal is broken

**Inactive ingredients** alcohol, carbomer, purified water, sodium hydroxide

#### Questions or comments?

Arnicare.com | BoironUSA.com  
Info@Boiron.com  
1-800-BOIRON-1 (1-800-264-7661)

## CREAM 1.33 oz, 2.5 oz, and 4.2 oz

### Drug Facts

Active ingredient	Purpose
Arnica montana..... 1X HPUS 7%	Relieves muscle pain & stiffness, swelling from injuries, discoloration from bruises

The letters "HPUS" indicate that the component in this product is officially monographed in the Homeopathic Pharmacopoeia of the United States.

#### Uses

- temporarily relieves muscle pain and stiffness due to:
  - minor injuries
  - overexertion
  - falls
- reduces symptoms of bruising such as:
  - pain
  - swelling
  - discoloration

#### Warnings

##### For external use only.

**Do not use** if you are allergic to Arnica montana or to any of this product's inactive ingredients.

##### When using this product

- avoid contact with eyes, mucous membranes, wounds, damaged or irritated skin
- use only as directed
- do not tightly wrap or bandage the treated area
- do not apply heat or ice to the treated area immediately before or after use.

##### Stop use and ask a doctor if

- condition persists for more than 3 days or worsens
- symptoms clear up and occur again within a few days.

**Keep out of reach of children.** If swallowed, get medical help or contact a Poison Control Center right away.

**Directions** Apply a thin layer of Arnicare Cream to affected area and massage gently as soon as possible after minor injury. Repeat 3 times a day or as needed. If heat or ice is applied, wait 5 minutes before applying Arnicare Cream.

#### Other information

- do not use if glued carton end flaps are open or if the tube seal is broken
- store at 68-77°F (20-25°C)

**Inactive ingredients** alcohol, caprylyl glycol, carbomer, cetyl palmitate, glycerin, lauroyl macroglycolglycerides, pegoxol-7 stearate, purified water, sodium hydroxide, sorbic acid, 1,2-hexanediol

#### Questions or comments?

Arnicare.com | BoironUSA.com  
Info@Boiron.com  
1-800-BOIRON-1 (1-800-264-7661)

## OINTMENT 1 oz

### Drug Facts

Active ingredient	Purpose
Arnica montana..... 4% HPUS	Relieves muscle pain & stiffness, swelling from injuries, discoloration from bruises

The letters "HPUS" indicate that the component in this product is officially monographed in the Homeopathic Pharmacopoeia of the United States.

#### Uses

- temporarily relieves muscle pain and stiffness due to:
  - minor injuries
  - overexertion
  - falls
- reduces symptoms of bruising such as:
  - pain
  - swelling
  - discoloration

#### Warnings

##### For external use only.

**Do not use** if you are allergic to Arnica montana or to any of this product's inactive ingredients.

##### When using this product

- avoid contact with eyes, mucous membranes, wounds, damaged or irritated skin
- use only as directed
- do not tightly wrap or bandage the treated area
- do not apply heat or ice to the treated area immediately before or after use.

##### Stop use and ask a doctor if

- condition persists for more than 3 days or worsens
- symptoms clear up and occur again within a few days.

**Keep out of reach of children.** If swallowed, get medical help or contact a Poison Control Center right away.

**Directions** Apply a thin layer of Arnicare Ointment to affected area as soon as possible after minor injury. Repeat 3 times a day or as needed. If heat or ice is applied, wait 5 minutes before applying Arnicare Ointment.

#### Other information

- do not use if glued carton end flaps are open or if the tube seal is broken
- store at 68-77°F (20-25°C)

#### Inactive ingredients

alcohol, purified water, white petrolatum USP

#### Questions or comments?

Arnicare.com | BoironUSA.com  
Info@Boiron.com  
1-800-BOIRON-1 (1-800-264-7661)

## 60 MELTAWAY TABLETS

### Drug Facts

Active ingredient	Purpose
Arnica montana..... 9C HPUS (2.5 mg)	Relieves muscle pain & stiffness, swelling from injuries, discoloration from bruises

The letters "HPUS" indicate that the component in this product is officially monographed in the Homeopathic Pharmacopoeia of the United States.

#### Uses

- temporarily relieves muscle pain and stiffness due to:
  - minor injuries
  - overexertion
  - falls
- reduces symptoms of bruising such as:
  - pain
  - swelling
  - discoloration

#### Warnings

**Stop use and ask a doctor if** symptoms persist for more than 7 days or worsen, new symptoms occur, or if redness or swelling is present. These could be signs of a serious condition.

**If pregnant or breastfeeding,** ask a health professional before use.

**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

#### Directions

Adults and children 6 years of age and older	At the onset of symptoms, dissolve 2 tablets under the tongue and repeat every hour for 2 more hours. Then, dissolve 2 tablets under the tongue every 6 hours until symptoms are relieved.
Children 2 to 5 years of age	Dissolve 2 tablets in 1 tablespoon of water for easier intake. Follow directions above.
Children under 2 years of age	Ask a doctor.

#### Other information

- do not use if glued carton end flaps are open or if the blister seal is broken
- store below 86°F (30°C)

#### Inactive ingredients

croscarmellose sodium, lactose, magnesium stearate

#### Questions or comments?

Arnicare.com | BoironUSA.com  
Info@Boiron.com  
1-800-BOIRON-1 (1-800-264-7661)