

# Bitter-Bloc™ Pure Powder

Natural Bitter Blocking Technology

**Bitter-Bloc™ Pure Powder** is our proprietary, full-strength Bitter-Bloc™ protein. This spray-dried, free-flowing powder has a slight tan appearance and readily dissolves in aqueous matrices. Depending on the amount used, it may require an analytical balance to achieve the desired ppm level. This 100% organic, water-soluble, and oil-miscible flavor enhancer can be easily incorporated into aqueous and anhydrous suspensions, troches, rapid dissolve tablets, hard lozenge/lollipop candy bases, sublingual drops, and nearly any oral preparation where optimal palatability is desired. Human and vet-friendly.

Typical starting use level: 100-600 ppm (0.01-0.06%).

SKU	Size	NDC/Reference No.
F0108-22	10 g	72467-0108-22
F0108-25	25 g	72467-0108-25
F0108-40	100 g	72467-0108-40
F0108-50	500 g	72467-0108-50

Typical Applications:	Highlights:	
✓ Pediatric Medications	✓ Anhydrous	✓ Low pH Stable
✓ Geriatric Medications	✓ Water Soluble	✓ Preservative and Dye Free
√ Veterinary Medications	✓ GRAS Status/Organic	✓ Non-GMO
√ Vitamin Supplements	√ Heat Stable	√ Natural (Plant-Based Ingredients)
✓ Bitter APIs	✓ No Allergy Declarations	

Typically, Bitter-Bloc<sup>™</sup> is effective in most aqueous liquid formulas at concentrations ranging from 100 to 600 ppm. The most effective usage often requires incremental adjustments depending on the bitterness of the ingredient(s).

### **Q:** How much Bitter-Bloc<sup>™</sup> do I need?

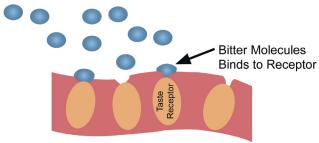
A: Generally, the more bitter the substance, the more Bitter-Bloc™ needed. Most aqueous formulas are effective at concentrations from 100 to 500 ppm.

#### **Q:** Is Bitter-Bloc<sup>™</sup> a sweetness modulator?

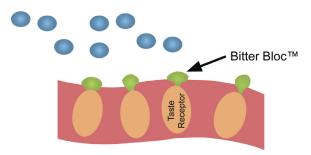
**A:** Bitter-Bloc™ is not a sweetness modulator as it does not affect sweetness. However, some tasters may notice an enhanced flavor profile. Since bitterness is a strong flavor, it often overpowers other flavors present. Bitter-Bloc™ reduces the perception of bitterness, allowing other flavors to be better perceived.

**Q:** Are there any applications where Bitter-Bloc™ will not work? **A:** Although Bitter-Bloc™ is effective in most applications, it will not work in the presence of active organisms such as probiotics.

## Bitter Molecules



### Bitter Molecules





### How Bitter-Bloc™ Technology Works:

Bitter-Bloc™ is an advanced protein technology that naturally blocks flavor defects in various applications, addressing palatability issues found in many APIs and excipients. Unlike other products that merely mask unpleasant flavors, this innovative solution effectively prevents these defects from reaching taste buds, resulting in a cleaner taste profile. This organic, water-soluble protein has been validated by third-party studies to modulate over 16 of the 25 bitter taste receptors on the tongue, significantly reducing bitterness perception. Additionally, it eliminates salty, metallic, astringent, and other off-notes in liquid, powder, or tablet-based oral formulations. With its versatile formulation capabilities, this protein technology offers a comprehensive solution for improving the taste profiles of compounded prescriptions, enhancing patient compliance and satisfaction.

Category	Natural Flavor Enhancer
Appearance	Fine tan powder
Description	Bitter-Bloc™ Pure Powder is an oral flavor modifier, bitterness blocker, and flavor profile enhancer that can be used to compound many oral medications. Common uses include oral pediatric, geriatric, HRT, pain, vitamin supplements, and veterinary medications. It is approved for use in the US and numerous other countries.
Ingredients	A proprietary organic compound composed of naturally derived vegetable proteins.
Allergy	Per the 2004 Food Allergen Labeling and Consumer Protection Act, no allergen declarations are required for this product as relating to corn, milk, egg, tree nuts, fish, crustacean shellfish, wheat, peanuts, gluten, and soybeans.
Technical Data	Solubility: 99.5% soluble up to 6% Bitter-Bloc™ m/v  Density: 0.5 g/mL  pH: 4.3  MP: 193-205℃ (Heat stable up to 190℃/374˚F). No known evidence of microwave degradation.  Shelf Life: 2 years from date of manufacture when stored in its original, unopened container in a cool, dry place.
Safety Data	Bitter-Bloc™ is a non-active flavor enhancer derived from food grade materials and is Generally Recognized as Safe (GRAS). It is a certified USDA organic bitter blocking technology that has achieved FEMA GRAS substance status (FEMA GRAS 4878).
Handling & Storage	Comment: Due to some fine particles, this product is liable to become compacted.  Storage Conditions: Product can be stored in ambient conditions for temperature, pressure, and humidity. Product should be kept in a tightly sealed container in cool, dry conditions.
Comments	Contact a SpecializedRx representative for use guidance. MSDS available upon request. Non-aqueous (oil) insoluble, but readily suspended in aqueous suspension vehicles. When introduced in an aqueous medium, Bitter-Bloc™ Pure Powder is 99.5% water soluble.