Bartek™
Malic. Fumaric. Dynamic.

Pecmate™ K
PECTIN ENHANCER

Gummy Candy FORMULATION

base formulation

This formulation represents PECMATE™ *K* Pectin Enhancer used at 0.35% dry basis (1% of 35% solution) in gummy candy.

Pectin's Perfect Partner

PECMATE™ Pectin Enhancer makes it easier to work with pectin to achieve true-to-fruit taste and consistent shape in vegan-friendly, gummy candies.

PECMATE™ *K* is a functionally-equivalent, potassium-based version of PECMATE™ that ensures full compatibility with products marketed as "sodium-free".

Key Advantages:

- ✓ Prevents pre-gelling during production
- ✓ Holds system in proper pH range, keeping candy mass fluid until desired set time
- ✓ Allows candy to gel properly once acid is added
- ✓ Significantly reduces process variability

Ingredient	Percent (%)
Distilled Water	28.80
EFG White Cane Sugar (Portion A)	10.00
Buffered Pectin - Ceamsa 4420	2.00
EFG White Cane Sugar (Portion B)	17.00
Tapioca or Corn Syrup, 42 DE	40.45
35% PECMATE™ *K* Pectin Enhancer Solution*	**1.00**
50% Acid Solution (Citric or Malic)	0.75
Total	100.00

* This is a starting formula. The range can be 0.5 – 1.5% of 35% solution depending on specific formulation and processing.

preparation & procedure

STEP 1: Initial Preparation

- Dry blend buffered pectin and Portion A of sugar.
  NOTE: If original formula includes addition of sodium citrate, then add. **This step is optional;** the function of sodium citrate is not replaced by PECMATE™ *K* at this stage.
- Make a 35% solution of PECMATE™ *K* Pectin Enhancer.*
- Make a 50% solution of acid.

STEP 2: Pectin Hydration

- Heat water in a pot to boiling. Slowly sprinkle in sugar A/pectin blend while quickly whisking to ensure proper dispersal.
- Once all of the sugar A/pectin blend is added, bring back to a boil and boil for 2 minutes to ensure full hydration.

STEP 3: Mother Syrup Addition

- Slowly add sugar B and syrup to batch and boil until a final solids of 77-82 brix is reached (final desired brix is dependent on depositing method).
- **Critical Step:** Reduce heat to stop boiling; hold at 180-200°F.

STEP 4: BFCAA Addition

- BFCAA: Buffer, Flavor, Color, Actives, Acids. It is very important to **add the buffer solution first and the acid solution last.**
- Add buffer (PECMATE™ *K*) solution until well blended, then add flavor and color.
- Quickly mix in acid solution to ensure dispersal, then deposit into molds as quickly as possible.