



## Low-Sugar\* Gummy Candy FORMULATION

\*50% reduced



### base formulation

This formulation represents PECMATE™ Pectin Enhancer used at 0.35% dry basis (1.75% of 20% solution) applied 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.

#### 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	19.25
EFG White Cane Sugar	9.00
Buffered Pectin- Ceamsa 4420	2.00
Soluble Corn Fiber Powder - T&L Promitor 90B	6.50
Allulose Syrup	22.00
Tapioca or Corn Syrup, 42 DE	37.75
20% PECMATE™ Pectin Enhancer Solution**	1.75
Flavor, Color	1.00
50% Acid Solution (Citric or Malic)	0.75
Total	100.00

\*\* This is a starting formula. The range can be 1.0 – 2.5% of 20% solution depending on specific formulation and processing.

## preparation & procedure

### STEP 1: INITIAL PREPARATION

- Dry blend buffered pectin and EFG white cane 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™ at this stage.

- Make a 20% solution of PECMATE™ Pectin Enhancer.\*\*
- Make a 50% solution of acid.

### STEP 2: PECTIN HYDRATION

- Heat water in a pot to boiling. Slowly sprinkle in sugar/pectin blend while quickly whisking to ensure proper dispersal.
- Once all of sugar/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 soluble corn fiber (**powder form**), allulose, and corn (or tapioca) syrup to batch, 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™) 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.

#### ORDER OF ADDITION

##### PECTIN SOLUTION

HEAT WATER TO 180°F AND ADD:  
PECTIN  
EFG WHITE CANE SUGAR  
SODIUM CITRATE

##### MOTHER SYRUP

HEAT WATER TO 180°F AND ADD:  
SOLUBLE CORN FIBER  
ALLULOSE  
CORN SYRUP

##### COOK

TEMPERATURE  
220-230°F  
SOLIDS  
77-82 Brix

##### HOLDING TANK

HOLD TEMP AT 180-200°F AND ADD, IN ORDER:  
PECMATE™  
FLAVOR  
COLOR  
ACTIVE  
ACID