# AnyAddy®

## Water Soluble Cellulose Ether For Food Application

www.lotte-cellulose.com





# **AnyAddy**®

AnyAddy®, a non-ionic water soluble cellulose ether, is a brand name of LOTTE Fine Chemical for their HPMC (Hydroxypropylmethylcellulose) and MC (Methylcellulose) products targeted for the food and dietary supplement applications.

AnyAddy® products are derived from natural wood pulp, meeting all the requirements of the current USP, EP and JP 'Hypromellose' along with Kosher and Halal Certifications.

AnyAddy®, in compliance with FDA, EU and FAO/WHO guidelines, is produced in compliance with GMP, retaining FSSC22000(GFSI), ISO9001 and ISO14001 certifications as well.



AnyAddy® Functional benefits in Food and Dietary Supplements:

- · Film Coat
- ·Thickener
- · Suspension Aid
- · Taste Masking
- · Stabilizer
- · Emulsifier
- · Mouthfeel Enhancement
- · Moisture Retention

## General Characteristics

## **HPMC**

CAS No.

INS No.

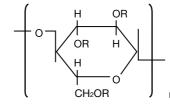
9004-65-3

E464

Generic name Hydroxypropylmethylcellulose,

Hypromellose

Reference FCC, USP
Chemical Structure



R:-H,-CH3 -CH2CH(OH)CH3

## MC

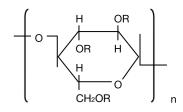
CAS No. 9004-67-5

INS No. E461

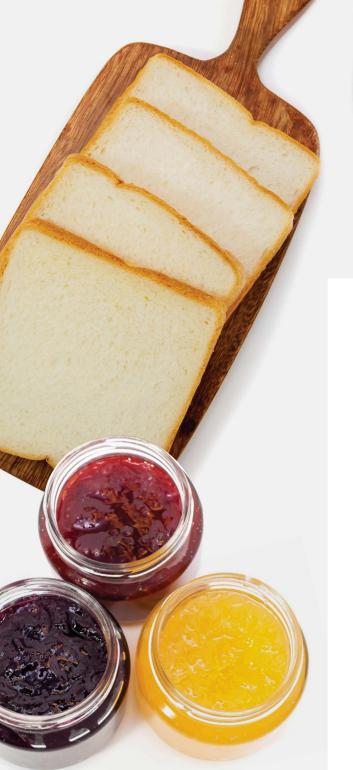
Generic name Methyl cellulose

Reference FCC, USP

Chemical Structure



R:-H,-CH3



# General Properties

Non-ionic water soluble cellulose ether derived from natural wood pulp

- · Being Hydrophilic and water-soluble
- · Being Non-digestible, Non-Allergenic, Non-Ionic, Non-GMO
- · Being tasteless and odorless
- $\cdot$  Being stable in the range of pH(3~11) and temperature (-40~280  $^{\circ}\text{C})$
- · Proven to be safe and stable material (LD50(oral): 5.2g/kg)
- $\cdot \ \text{Delivering excellent water-holding property} \\$
- Maintaining shape by the unique property of reversible thermo-gelling
- Providing excellent film formation for coated foods and dietary supplements
- · Acting as a replacement of Gluten, Fat, and Egg white
- Working for various food applications as foam stabilizer, emulsifier, dispersing agent, etc.







# Product Types Grades

Viscosity(cPs)	HPMC			MO
	AN type	BN type	CN type	MC
3	AN3			
4		BN4		
6	AN6			
15	AN15			MC15
50	AN50	BN50		
100			CN10M	
450		BN45M		MC40M
1500				MC15H
4000		BN40H	CN40H	MC40H
15000			CN15U	
100000			CN10T	
Gel Point	60°C	65°C	90°C	50~60 °C

AnyAddy® comes in diverse viscosity ranges from 3 to 100,000cPs (2% solution).

# How to use AnyAddy®

**Powder Mixing** 

- · Mix AnyAddy® powder with other dry food materials (flour, starch sugar, salt, etc.)
- · Ensure thorough mixing to achieve uniformity
- · Add the mixture into the cold water (under 40°C)

**Liquid Dispersion** 

- · Disperse AnyAddy® powder into the liquid (vegetable oil, glycerin, corn syrup etc.)
- · Mix the liquid suspension with the cold water and other raw materials

Hot Water Dispersion

- · Disperse AnyAddy® powder into the hot water (over 80°C)
- · Stir until it cools down to room temperature

## **Package**

AnyAddy® Package

- · HPMC AN type : 25kgs paper bag
- · HPMC BN & CN type, MC: 20kgs paper bag

# **Applications**

## **Benefits**

Applications	Functionality	Recommended AnyAddy®	Dosage level (Approx. %)
	Food		
Gluten Free Bakery · improves volume and aeration Products · better texture		CN type MC type	1.25%
Vegetarian Products	<ul><li>controls and binds moisture</li><li>binds and maintains product shape</li></ul>	BN type MC type	1.30%
Formed Products (e.g. potato croquettes)	<ul><li>controls and binds moisture</li><li>binds and maintains product shape</li></ul>	CN type MC type	0.30%
Fillings Sweet and Savory	<ul><li>anti-boiling out</li><li>controls and binds moisture</li></ul>	BN type MC type	0.50%
Bakery Blends	<ul><li>better texture</li><li>moisture retention</li><li>extends shelf life</li></ul>	BN type CN type	0.30%
Doughnuts · reduces oil uptake during frying		CN type MC type	0.30%
Batters and Coatings	<ul><li>reduces oil uptake</li><li>improves viscosity and adhesion</li></ul>	CN type MC type	0.40%
Dairy Toppings	Foppings · better overrun · improves freeze/thaw stability		0.30%
Non-Dairy Creams	<ul><li>better overrun</li><li>smoother texture</li><li>increases stability</li></ul>	AN type BN type	0.70%
Beverage and Brewery	<del>-</del>		0.30%
Soft candy and Chewing gum	moisture retention     coating	BN type	0.10%
Noodle	· increases storage stability · prevents elution of starch		0.40%
Ice cream	stabilizes fat droplet and air cell     forms the ice crystal properly	AN type BN type	0.40%
	Dietary supplements	3	
Film Coating	· makes a transparent film	AN type	1~3%
Binder	inder · enhances the hardness of tablet (wet granulation / direct compression)		2~10%
Time Release (Sustained Release)	<ul><li>hydrates to create a gel layer</li><li>controls ADI release pattern</li></ul>	CN type	5~20%



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