

GENIGEL®M45**1. SCOPE**

<i>Company</i>	SMS Corporation Co., Ltd.
<i>Description</i>	GENIGEL®M45 is modified waxy tapioca starch manufactured in compliance with US FDA 21CFR 172.892 (Food starch-modified)
<i>Appearance</i>	Yellowish-white powder
<i>EU Classification</i>	E1442

2. PHYSICAL AND CHEMICAL SPECIFICATION

<i>Moisture (%w/w)</i>	10.0 Max
<i>pH</i>	4.5-7.0
<i>Sieve analysis (%w/w)</i>	30.0 Max
<i>Viscosity (mPa.s)</i>	400-2,400
<i>Sulfur dioxide (ppm)</i>	Less than 10

3. MICROBIOLOGICAL SPECIFICATION

<i>Total plate count (CFU/g)</i>	5,000 Max
<i>Yeast and mold (CFU/g)</i>	100 Max
<i>E.coli (MPN/g)</i>	Less than 3
<i>Salmonella spp. (/25g)</i>	Absent

4. STORAGE AND SHELF LIFE

<i>Storage condition</i>	Clean and dry condition at ambient temperature, away from odorous materials
<i>Shelf life</i>	24 months

5. TEST METHOD

<i>Moisture (%w/w)</i>	Based on ISO 1666:1996 (E)
<i>pH</i>	5.0% dry substance (solution)
<i>Sieve analysis (%w/w)</i>	Mechanical sieving on 150 micron
<i>Viscosity (mPa.s)</i>	Brookfield viscometer (Model-LV) 5.0% dry substance at 30°C, 60rpm
<i>Sulfur dioxide (ppm)</i>	Based on ISO 5379:2013 (E)
<i>Total plate count (CFU/g)</i>	Based on ISO 4833:1991 (E)
<i>Yeast and mold (CFU/g)</i>	Based on ISO 7954:1987 (E)
<i>E.coli (MPN/g)</i>	Based on FDA BAM Online, 2013 (Chapter 4)
<i>Salmonella spp. (/25g)</i>	Based on ISO 6579:2002 (E)

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6. NUTRITIONAL INFORMATION

Nutritional data	(Value per 100 grams)		
	Value	Unit	Method
<i>Energy</i>	385	kcal	Regulation (EU) 1169/2011
<i>Total fat</i>	0.07	g	Modified AOAC (2012), 996.06
<i>Saturated Fat</i>	0	g	Modified AOAC (2012), 996.06
<i>Cholesterol</i>	0	mg	In-house method
<i>Protein</i>	0	g	Modified AOAC (2012), 981.10
<i>Total Carbohydrates</i>	min 95	g	Calculation
<i>Dietary Fiber</i>	< 0.8	g	Modified AOAC (2012), 985.29
<i>Sugar</i>	0	g	In-house method
<i>Sodium</i>	3	mg	Modified AOAC (2012), 984.27
<i>Vitamin A</i>	0	ug RE	In-house method
<i>Vitamin B1</i>	0	mg	In-house method
<i>Vitamin B2</i>	0	mg	In-house method
<i>Calcium</i>	36	mg	Modified AOAC (2012), 984.27
<i>Iron</i>	0	mg	Modified AOAC (2012), 984.27
<i>Ash</i>	< 0.3	g	AOAC (2012), 923.03
<i>Moisture</i>	< 5	g	AOAC (2012), 985.29