

## PRODUCT DESCRIPTION - PD 203522-3.3EN

Material no. M9041316

### MARZYME® SUPREME DS - 5 GAL

Coagulant

#### Description

---

A clear, light amber colored solution of heat labile microbial coagulant derived from the pure culture fermentation of *Mucor miehei*. The specific protease is concentrated, purified and standardized to uniform milk clotting activity, specific gravity, pH and preservative levels.

#### Usage levels

---

Application in cheese industry:

Cheddar Cheese  
Usage rate / 1000 lb. milk 1.25 - 1.50 oz.

Swiss, Italian and other similar varieties  
Usage rate / 1000 lb. milk 0.5 - 1.0 oz.

MARZYME® SUPREME DS - 5 GAL is a highly heat labile coagulant. The rate of enzyme inactivation through pasteurization corresponds to that of calf rennet, making it ideal for cheese manufacturers processing their own whey for use in other food products.

#### Directions for use

---

- Before adding coagulant to milk, dilute it with 80 times its total volume of cool tap water in a sanitary plastic or stainless container.
- When adding diluted coagulant to cheese milk, use good agitation to thoroughly disperse and distribute it throughout the milk.
- After being thoroughly mixed, allow the vat to remain quiescent until cutting.

#### Composition

---

Microbial Rennet produced by pure culture fermentation of *Mucor miehei*, sodium chloride, sodium benzoate and caramel color.

#### Properties

---

Coagulation strength is 200 - 220 MCU/ml  
MARZYME® SUPREME DS - 5 GAL offers the following benefits for whey applications:  
- Heat Lability = < 2.5 % at 150 °F by test  
- Lipase Activity = < 1 by cream test  
- Amylase Activity = Not detected (<75 MWU/ml)

#### Microbiological specifications

---

A typical coagulant analysis follows:

Standard Plate Count	< 10,000 / ml
Coliforms	< 1 / ml
E. coli	neg. by test (< 0.3 / g)
Staphylococcus (coag. +)	neg. by test (< 1 / g)
Salmonella	neg. (40 g enrichment)
Listeria	neg. (25 g enrichment)
Yeast	< 10 / ml
Mold	< 10 / ml

#### Storage

---

Store at refrigeration temperatures 40 - 45 °F (4.5 - 7.5 °C). Store in tightly closed containers in a clean dry place. Best if used within 3 months of date of receipt when stored at 4°C or lower.

#### Packaging

---

5 gallon net volume polyethylene container.

#### Purity and legal status

---

Local regulations should always be consulted concerning the status of this product, as legislation regarding its intended use may vary from country to country.

#### Safety and handling

---

MSDS is available on request.

## PRODUCT DESCRIPTION - PD 203522-3.3EN

Material no. M9041316

### MARZYME® SUPREME DS - 5 GAL

Coagulant

#### Kosher status

---

Kosher OU Pareve

#### Halal status

---

IFANCA certification

#### Allergens

---

Below table indicates the presence of the following allergens and products thereof:

Yes	No	Allergens	Description of components
	X	wheat	
	X	other cereals containing gluten	
	X	crustacean shellfish	
	X	eggs	
	X	fish	
	X	peanuts	
	X	soybeans	
	X	milk (including lactose)	
	X	nuts	
	X	celery	
	X	mustard	
	X	sesame seeds	
	X	sulphur dioxide and sulphites (> 10 mg/kg)	
	X	lupin	
	X	molluscs	

Local regulation has always to be consulted as allergen labelling requirements may vary from country to country.

#### GMO status

---

MARZYME® SUPREME DS - 5 GAL does not consist of, nor contains, nor is produced from genetically modified organisms according to the definitions of Regulation (EC) 1829/2003 and Regulation (EC) 1830/2003 of the European Parliament and of the Council of 22 September 2003.