

## Product Technical Dossier

Product	Manganese Bisglycinate 16% Mn
CCL Product Code	P13146

### Specification Details

Identification (ICP)	Specification
Assay (on dry basis)	Positive
Appearance	Mn Content 16.0% - 20.0%
Colour	Powder
Aroma	Light Tan to Light Brown
Flavour	Characteristic
Sieve Analysis % passed	Min 90% 40 Mesh Min 85% pass 80 Mesh
Loss on Drying	Max 6%
Tapped Density	Min 0.70g/ml

### Microbiological Limits

Total Viable Count	Max 3,000cfu/g
Yeasts & Moulds	Max 300cfu/g
E. Coli	Negative/10g
Salmonella	Negative/25g
Coliforms	Negative/10g
Staphylococcus aureus	Negative/10g

### Heavy Metal Limits

Lead (Pb)	Max 2ppm
Cadmium (Cd)	Max 0.5ppm
Mercury (Hg)	Max 0.1ppm
Arsenic (As)	Max 1ppm

Product Code: P13146

Version: 4

Page 1 of 6

**Committed to meeting quality standards. BRC Food Safety . FEMAS . FSMA . Informed Manufacturer. Soil Association  
Organic . Halal . Kosher .**

For a full range of our accreditations visit [www.cambridgecommodities.com/quality-accreditations/certificates](http://www.cambridgecommodities.com/quality-accreditations/certificates)



**+44 (0) 1353667258 | [www.cambridgecommodities.com](http://www.cambridgecommodities.com) | [enquiries@cambridgecommodities.com](mailto:enquiries@cambridgecommodities.com)**

#### Additional Technical Information

Raw Material Full Botanical / Chemical Name	Manganese Bis-Glycinate
The material is Food Grade	Yes
Country of Origin	USA
Country of Manufacture	USA
Average Molecular weight	202.94 g/mol
Molecular Formula	Mn (C <sub>2</sub> H <sub>4</sub> NO <sub>2</sub> ) <sub>2</sub> 2H <sub>2</sub> O
Shelf Life from Date of Manufacture	Min 3 years
Suitable for Vegetarians?	Yes
Suitable for Vegans?	Yes
Storage Conditions	This material is to be stored in a tightly sealed bag/container and to be kept in a cool place away from moisture and direct sunlight.

#### Composition Origin, Function and Percentages

Ingredients	Function	% composition	Source
Manganese Bis-Glycinate	Active	100%	Manganese Carbonate (Mined), L-Glycine (Derived from Sodium Glyconate)

Please note that surveillance testing may mean that not all the parameters stated on this specification are tested for every batch.

The allergen information is supplied by the manufacturer, we have not tested for each individual allergen to ensure they are not present. The information given is based on a documented risk assessment and is accurate to the best of our knowledge. If you intend to make a voluntary "free from" claim on your pack, additional testing may need to be carried out. For technical and labelling guidance, you should always speak to the competent authority for the market or member state in which the final products are placed.

Product Code: P13146

Version: 4

Page 2 of 6

**Committed to meeting quality standards. BRC Food Safety . FEMAS . FSMA . Informed Manufacturer. Soil Association  
Organic . Halal . Kosher .**

For a full range of our accreditations visit [www.cambridgecommodities.com/quality-accreditations/certificates](http://www.cambridgecommodities.com/quality-accreditations/certificates)



**+44 (0) 1353667258 | [www.cambridgecommodities.com](http://www.cambridgecommodities.com) | [enquiries@cambridgecommodities.com](mailto:enquiries@cambridgecommodities.com)**

Allergens	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	Where applicable, is there risk of cross-contamination? YES/NO or N/A
Peanuts and Peanut Derivatives (including possible cross contamination)	NO	NO	N/A
Nut and Nut Derivatives <i>Almond (Amygdalus communis L.), Hazelnut (Corylus avellana), Walnut (Juglans regia), Cashew (Anacardium occidentale), Pecan nut (Carya illinoensis (Wangenh.) K. Koch), Brazil nut (Bertholletia excelsa), Pistachio nut (Pistacia vera), Macadamia nut and Queensland nut (Macadamia ternifolia)</i>	NO	YES	NO
Sesame Seeds and Sesame Seed Derivatives	NO	YES	NO
Milk and Milk Derivatives (including lactose)	NO	YES	NO
Egg and Egg Derivatives	NO	NO	N/A
Cereals and Derivatives containing OR POTENTIALLY CONTAMINATED WITH Gluten (wheat, wheatgrass, faro, freekeh, spelt, kamut, rye, oats, barley, barleygrass)	NO	NO	N/A
Soya and Soya Derivatives	NO	YES	NO
Lupin and Lupin Derivatives	NO	NO	N/A
Mustard and Mustard Derivatives	NO	YES	NO
Celery or Celery Derivatives (including Celeriac)	NO	YES	NO
Fish and Fish Derivatives	NO	YES	NO
Molluscs and their Derivatives	NO	NO	N/A
Crustaceans and their Derivatives	NO	YES	NO
Sulphur Dioxide and Sulphites (E220, E228) at levels > 10mg/kg or 10mg/litre	NO	NO	N/A

Additives / Contaminants / Dietary Requirements / Intolerances	Product Contains YES/NO	Listed Item on Site at Manufacturer YES/NO	Where applicable, is there risk of cross-contamination? YES/NO or N/A
Additives / E Numbers	NO	YES	NO
Antioxidants	NO	YES	NO
Ethylene Oxide	NO	NO	N/A
Gelatine	NO	NO	N/A
Flavourings (Artificial / Nature Identical / Natural / Smoked)	NO	YES	NO
Maize / Corn and any Derivatives	NO	YES	NO
Legumes / Pulses	NO	YES	NO
Rice and Rice Derivatives	YES	YES	N/A
Added Salt	NO	NO	N/A
Added Sugar / artificial or natural sweeteners	NO	YES	NO
Aspartame	NO	YES	NO
BHA / BHT (E320 / E321)	NO	YES	NO
Caffeine	NO	YES	NO
Colours (Artificial / Nature Identical / Natural / Smoked)	NO	YES	NO
Dextrose	NO	YES	NO
other Seeds and Seed Derivatives (Poppy Seeds, Cotton Seeds, Sunflower Seeds)	NO	YES	NO
Kiwi fruit	NO	YES	NO
Polyols (sugar alcohols)	NO	YES	NO
Grapefruit	NO	YES	NO
Sorbic Acid (E200, E203)	NO	NO	N/A
Any other Preservatives	NO	YES	NO
Ethanol	NO	NO	N/A
Honey	NO	YES	NO
Lactose	NO	YES	NO
Yeast and Yeast Derivatives	NO	YES	NO
All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.)	NO	YES	NO
Bovine Products or Derivatives (which may include growth/yield hormones, antibiotics etc.)	NO	NO	N/A

Product Code: P13146

Version: 4

Page 3 of 6

**Committed to meeting quality standards. BRC Food Safety . FEMAS . FSMA . Informed Manufacturer. Soil Association**  
**Organic . Halal . Kosher .**

For a full range of our accreditations visit [www.cambridgecommodities.com/quality-accreditations/certificates](http://www.cambridgecommodities.com/quality-accreditations/certificates)

+44 (0) 1353667258 | [www.cambridgecommodities.com](http://www.cambridgecommodities.com) | [enquiries@cambridgecommodities.com](mailto:enquiries@cambridgecommodities.com)

## Statements

<b>Confirmation of BSE / TSE Status</b> This is to certify that this product complies with all relevant current UK and EU Legislative requirements in regard to Transmissible Spongiform Encephalopathies (TSE) and Bovine Spongiform Encephalopathy (BSE) for human food, and so is free of TSE/BSE.	Yes
This is also to certify that, during the course of their manufacture, the above-mentioned product did not come into contact with any materials, which could be derived from TSE/BSE risk materials.	Yes
<b>Confirmation of GM Status</b> This is to certify that this product is not manufactured from GM raw materials and is therefore not subject to labelling under current regulations.	Yes
<b>Confirmation of Non-Irradiation Status</b> This is to certify that this product, whole or in part, has not been subjected to Ionising Radiation as per European Directives.	Yes
<b>Confirmation of Nandrolone Status</b> This is to certify that this product, whole or in part, has not come into contact with Nandrolone or any of its precursors in any way.	Yes
<b>Confirmation of IOC Product Status</b> This is to certify that this product, whole or in part, has not come into contact with any product/s, which is banned by the IOC (International Olympics Committee) and or WADA.	Yes
<b>Confirmation of Animal Testing Status</b> This is to certify that all the products sold by Cambridge Commodities have not been tested on animals in any part of its manufacture in accordance with current regulations.	Yes
<b>Confirmation of Pesticides Status</b> This is to certify that the above-mentioned product complies with the EU max residue limits (MRLs) on pesticides.	Yes
<b>Confirmation of Nanoparticles Status</b> This is to certify that unless otherwise stated, the above-mentioned product is free of nanoparticles. Commission Recommendation, defines as follows: "Nanomaterial" means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm".	Yes
<b>Packaging Status</b> We hereby certify that the packaging used in the above-mentioned material conforms to EU regulations and subsequent amendments on food grade packaging	Yes
<b>Confirmation of PAH status</b> This is to certify that the above-mentioned product complies with the max PAH limits set by the EU regulations	Yes

Product Code: P13146

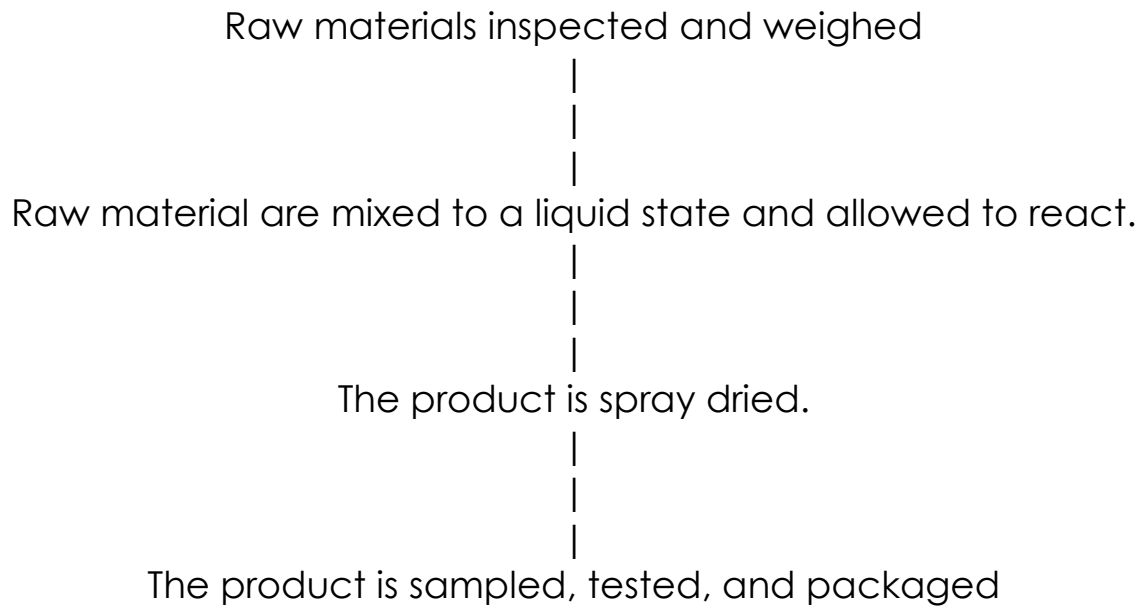
Version: 4

Page 4 of 6

**Committed to meeting quality standards. BRC Food Safety . FEMAS . FSMA . Informed Manufacturer. Soil Association  
Organic . Halal . Kosher .**

For a full range of our accreditations visit [www.cambridgecommodities.com/quality-accreditations/certificates](http://www.cambridgecommodities.com/quality-accreditations/certificates)


**+44 (0) 1353667258 | [www.cambridgecommodities.com](http://www.cambridgecommodities.com) | [enquiries@cambridgecommodities.com](mailto:enquiries@cambridgecommodities.com)**



## Material Safety Data Sheet

To download this product's material safety data sheet, please click [here](#) and search for the Cambridge Commodities product code. If there is no MSDS available, please follow the on-screen instructions to request one.

The Information provided in this document is subject to change and the batch specific certificate of analysis should always be referenced.

To be used as per local legislation.

### Change History

Version	Change	Customer Notification required Yes / No
1	First Issue	N/A
2	Kosher Status and Logo have been added	No
3	Added sieve analysis 85% pass 80 Mesh  Updated allergen table to show the following listed on site with no risk of contamination, Nuts and Derivatives, Sesame Seeds and Derivatives, Milk and Milk Derivatives (including lactose), Soya and Derivatives, Mustard and Derivatives, Celery or Derivatives (including Celeriac), Fish and Derivatives, Crustaceans and their Derivatives, Additives / E Numbers, Antioxidants, Flavourings (Artificial / Nature Identical / Natural / Smoked), Maize / Corn and any Derivatives, Legumes / Pulses, Added Sugar / artificial or natural sweeteners, Aspartame, Caffeine, Colours (Artificial / Nature Identical / Natural / Smoked), Dextrose, other Seeds and Seed Derivatives, Kiwi fruit, Polyols (sugar alcohols), grapefruit, Any other Preservatives, Honey, Lactose, Yeast and Yeast Derivatives, All Animal Products (Beef, Pork, Poultry or other) and Derivatives (which may include growth/yield hormones, antibiotics etc.) General reformat	Yes
4	Added "on dry basis" to Assay	Yes

### Document Approval

Originator	Approver
 <b>Mel Lee</b> Quality Administrator	 <b>Cecilia Anzani</b> Senior Quality Specialist

Product Code: P13146

Version: 4

Page 6 of 6

**Committed to meeting quality standards. BRC Food Safety . FEMAS . FSMA . Informed Manufacturer. Soil Association  
Organic . Halal . Kosher .**

For a full range of our accreditations visit [www.cambridgecommodities.com/quality-accreditations/certificates](http://www.cambridgecommodities.com/quality-accreditations/certificates)



**+44 (0) 1353667258 | [www.cambridgecommodities.com](http://www.cambridgecommodities.com) | [enquiries@cambridgecommodities.com](mailto:enquiries@cambridgecommodities.com)**