

## SAFETY DATA SHEET



Claristar™

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product name : Claristar™  
 Internal code : WW32518  
 Synonyms : Mannoprotein extracted from yeast  
 Chemical formula : Not applicable.  
 REACH Registration number :  Not available.

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : This is a preparation for application in the food and flavour industry.

### 1.3 Details of the supplier of the safety data sheet

Supplier : DSM Food Specialties B.V.  
 Ingredients Development  
 P.O. Box 1  
 2600 MA Delft  
 The Netherlands  
 e-mail address of person responsible for this SDS : Info.Worldwise@dsm.com

### 1.4 Emergency telephone number

Emergency telephone number : +31 (0)15 279 2380

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition :  Mixture

#### Classification according to Directive 1999/45/EC [DPD]

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.  
 Physical/chemical hazards : Based on the available data of this product no hazardous properties are known.  
 Human health hazards : Based on the available data of this product no hazardous properties are known.  
 Environmental hazards : Based on the available data of this product no hazardous properties are known.

### 2.2 Label elements

Hazard symbol or symbols :  
 Indication of danger :  
 According to EU Directives 67/548/EEC and 1999/45/EC this product does not require labelling with symbols and/or R-phrases.  
 Safety phrases : Not applicable.  
 Hazardous ingredients :

### 2.3 Other hazards

Other hazards which do not result in classification :  Not available.

## SECTION 3: Composition/information on ingredients

Substance/mixture :  Mixture

Product/ingredient name	Identifiers	%	Classification	
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]

Total of solids	EC: - CAS: -	20	Not classified.	Not classified.
protein (as Nx6.25)	EC: - CAS: -	4 - 8	Not classified.	Not classified.
Sulphite	EC: - CAS: -	0.15 - 0.7	Not classified.	Not classified.
			<b>See Section 16 for the full text of the R-phrases declared above.</b>	<b>See Section 16 for the full text of the H statements declared above.</b>

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Rinse with plenty of running water. Get medical attention if symptoms occur.
- Inhalation** : Inhaled, remove to fresh air. Get medical attention if symptoms occur.
- Skin contact** : Rinse with plenty of running water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Swallowed, rinse mouth with water (only if the person is conscious). Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Irritating effects can not be excluded.
- Inhalation** : There is no known acute effect after over-exposure to this product.
- Skin contact** : Prolonged or repeated skin contact may be irritating. (slight redness).
- Ingestion** : There is no known acute effect after over-exposure to this product.

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Small fire

- Suitable** : Non-combustible. Use extinguishing media suitable for surrounding materials.

#### Large fire

- Suitable** : Non-combustible. Use extinguishing media suitable for surrounding materials.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : No specific hazard.
- Hazardous combustion products** : In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, nitrogen oxides (NO, NO<sub>2</sub> etc.), ammonia (NH<sub>3</sub>), amines.

### 5.3 Advice for firefighters

- Special precautions for fire-fighters** : No special measures required.
- Special protective equipment for fire-fighters** : Wear suitable protective clothing. Self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** :  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
- For emergency responders** :  specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

- 6.2 Environmental precautions** :  No special measures required.

### 6.3 Methods and materials for containment and cleaning up

- Small spill** :  Take up with suitable material. Place in a suitable container. Clean up affected area with a large amount of water.
- Large spill** :  Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container. Recycle, if possible. Clean up affected area with a large amount of water.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** :  Use with adequate ventilation.
- Advice on general occupational hygiene** :  Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- 7.2 Conditions for safe storage, including any incompatibilities** :  Keep in a cool and dry place. Protect from (sun)light.

Do not store above the following temperature: 10 °C.

### Packaging materials

- Suitable** : Polyethylene, high density (PEHD).

### 7.3 Specific end use(s)

- Recommendations** :  Not available.
- Industrial sector specific solutions** :  Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

- Recommended monitoring procedures** :  If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

#### Derived effect levels

No DELs available.

#### Predicted effect concentrations

No PECs available.

## 8.2 Exposure controls

**Appropriate engineering controls** :  None required. However, use of adequate ventilation is good industrial practice.

### Individual protection measures

**Hygiene measures** :  When using do not eat, drink or smoke. Wash hands after handling compounds and before eating, smoking and using the lavatory and at the end of the day.

**Eye/face protection** : Safety glasses with side shields.

**Hand protection** :  8 hours (breakthrough time): Leather-lined working gloves or latex gloves. Replace damaged gloves.

**Skin and body** : Working clothes.

**Respiratory protection** : No special protection is required. In case of insufficient ventilation, wear suitable respiratory equipment.

**Environmental exposure controls** :  Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual exposure situation.**

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	: Liquid. [viscous]
<b>Colour</b>	: Yellow - light brown
<b>Odour</b>	: Characteristic.
<b>Odour threshold</b>	: Not available.
<b>pH</b>	: 5 to 6
<b>Melting point</b>	: <input checked="" type="checkbox"/> Not available.
<b>Initial boiling point and boiling range</b>	: <input checked="" type="checkbox"/> Not available.
<b>Softening range</b>	: Not available.
<b>Flash point</b>	: Not applicable.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: <input checked="" type="checkbox"/> Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Density ( g/cm<sup>3</sup> )</b>	: Not available.
<b>Bulk density</b>	: Not available.
<b>Solubility</b>	: Soluble in the following materials: cold water.
<b>Solubility in water</b>	: Not available.
<b>Solubility at room temperature</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: <input checked="" type="checkbox"/> Not available.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: <input checked="" type="checkbox"/> Not available.
<b>Viscosity</b>	: Not available.
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: <input checked="" type="checkbox"/> Not available.

### 9.2 Other information

**Remarks** :  Not available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** :  No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** :  Stable under recommended storage and handling conditions (see section 7). Shelf-life: 6 months.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Exposure to sources of heat.

**10.5 Incompatible materials** : Oxidizing substances.

**10.6 Hazardous decomposition products** : In case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

**Conclusion/Summary** : Not available.

#### Irritation/Corrosion

##### Conclusion/Summary

**Skin** : Not available.

**Eyes** : Not available.

**Respiratory** : Not available.

#### Sensitiser

##### Conclusion/Summary

**Skin** : Not available.

**Respiratory** : Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Eye contact** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : No specific data.

**Ingestion** : No specific data.

**Skin contact** : No specific data.

**Eye contact** : No specific data.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Remarks** : Prolonged or repeated skin contact may result in: irritation and skin rash.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

Not available.

**12.4 Mobility in soil**Soil/water partition coefficient (K<sub>oc</sub>) :  Not available.

Mobility : Not available.

**12.5 Results of PBT and vPvB assessment**

PBT : Not applicable.

vPvB : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.**Remarks** : The organic fraction is readily biodegradable.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods**Product**Methods of disposal** :  Waste must be disposed of in accordance with national and local environmental regulations.**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.Packaging**Methods of disposal** :  The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.**Special precautions** :  This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	<input checked="" type="checkbox"/>	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	<input checked="" type="checkbox"/> No.	<input checked="" type="checkbox"/> No.	<input checked="" type="checkbox"/> No.	<input checked="" type="checkbox"/> No.
14.6 Special precautions for user	<input checked="" type="checkbox"/> Not available.	<input checked="" type="checkbox"/> Not available.	<input checked="" type="checkbox"/> Not available.	<input checked="" type="checkbox"/> Not available.
Additional information	-	-	-	-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Not applicable.

**15.2 Chemical Safety Assessment** : Not applicable.

**SECTION 16: Other information**
**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Not classified.

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Classification	Justification
Not classified.	

**Full text of abbreviated H statements** : Not applicable.

**Full text of classifications [CLP/GHS]** : Not applicable.

**Full text of abbreviated R phrases** : Not applicable.

**Full text of classifications [DSD/DPD]** : Not applicable.

**Alterations compared to the previous version** : Alterations compared to the previous version are marked with a little (blue) triangle.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

**Sources of key data** : Literature data and/or investigation reports are available through the manufacturer.

**Internal code** : WW32518

**Training advice** : Before handling this substance/preparation, the personnel involved should be instructed by means of this safety data sheet.

**Notice to reader**

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

**History**

**Date of printing** : 27 February 2011.

**Date of issue** : 27 February 2011

**Version** : 4.01