

Printing date 04/25/2019 Reviewed on 04/25/2019

1 Identification

· Product identifier

www.mpbio.com

- · Trade name: 12% Protein Diet
- · Article number: 960258
- · Application of the substance / the mixture For Research Use Only
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 **United States**
- · Information department: Quality Control Department
- · Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

- · Classification of the substance or mixture
- The product is not classified, according to the Globally Harmonized System (GHS).
- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0Fire = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture of substances listed below with nonhazardous additions.

Mixture: consisting of the following components.

CAS: 57-50-1 Sucrose

EINECS: 200-334-9 RTECS: WN6500000 50-90%

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CAS: 9005-25-8	Corn Starch	10-50%
EINECS: 232-679-6		
RTECS: GM5090000		
CAS: 9004-34-6	Alphacel	2.5-10%
EINECS: 232-674-9	•	
RTECS: FJ5691460		

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Flush eyes with running water as a precaution.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:		
7778-80-5 potassium sulphate	20 mg/m³	
1309-48-4 magnesium oxide	30 mg/m³	
7631-86-9 silicon dioxide, chemically prepared	18 mg/m³	
150-13-0 p-Aminobenzoic Acid	15 mg/m³	
598-62-9 Manganese Carbonate	6.3 mg/m	
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3486-35-9	Zinc Carbonate	(Contd. of page 12 mg/m³
	Chromium Potassium Sulfate Dodecahydrate	14 mg/m ³
	Cupric Carbonate	5.2 mg/m ³
	Sodium Selenite	1.3 mg/m ³
	potassium iodate	0.45 mg/m
PAC-2:		
	Potassium citrate monohydrate	330 mg/m
	potassium sulphate	220 mg/m
	magnesium oxide	120 mg/m
	silicon dioxide, chemically prepared	740 mg/n
	p-Aminobenzoic Acid	69 mg/m ³
598-62-9	Manganese Carbonate	10 mg/m ³
3486-35-9	Zinc Carbonate	130 mg/n
7788-99-0	Chromium Potassium Sulfate Dodecahydrate	160 mg/n
12069-69-1	Cupric Carbonate	45 mg/m ³
10102-18-8	Sodium Selenite	2.3 mg/m
7758-05-6	potassium iodate	4.9 mg/m
<i>PAC-3:</i>		
6100-05-6	Potassium citrate monohydrate	2,000 mg/n
7778-80-5	potassium sulphate	1,300 mg/n
1309-48-4	magnesium oxide	730 mg/m³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/n
150-13-0	p-Aminobenzoic Acid	410 mg/m^3
598-62-9	Manganese Carbonate	60 mg/m³
3486-35-9	Zinc Carbonate	750 mg/m³
7788-99-0	Chromium Potassium Sulfate Dodecahydrate	950 mg/m³
12069-69-1	Cupric Carbonate	270 mg/m³
10102-18-8	Sodium Selenite	3.1 mg/m^3
7758-05-6	potassium iodate	29 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 2-8°C
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see Section 7.

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· Cont	rol parameters		
· Com	ponents with limit values that require monitoring at the workplace:		
57-50	57-50-1 Sucrose		
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction		
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction		
TLV	Long-term value: 10 mg/m³		
9005	-25-8 Corn Starch		
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction		
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction		
TLV	Long-term value: 10 mg/m³		
9004	-34-6 Alphacel		
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction		
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction		
TLV	Long-term value: 10 mg/m³		

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Not required.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Pellet Color: Light yellow · Odor: Indeterminate

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		(Contd. of page
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
· Change in condition		
Boiling point/Boiling range:	Undetermined.	
· Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	See section 10	
Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
Vapor pressure:	Not applicable.	
Density:	Not Applicable	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with	Not Determined	
Water:	Not determined.	
	Insoluble.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
VOC content:	0.00 %	
Solids content:	95.0 %	
Other information	No further relevant information available.	

10 Stability and reactivity

- $\cdot \textit{Reactivity No further relevant information available}.$
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritant and potentially harmful
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (Inter	national Agency for Research on Cancer)	
7631-86-9	silicon dioxide, chemically prepared	3
150-13-0	p-Aminobenzoic Acid	3
10102-18-8	Sodium Selenite	3
· NTP (Nation	nal Toxicology Program)	
None of the	ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the	ingredients is listed.	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Can not be disposed of together with household garbage. Do not allow product to reach sewage system.

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· Uncleaned packagings:

· Recommendation: Discard must be made according to official regulations.

UN-Number	
DOT, ADR, ADN, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not regulated
Packing group DOT, ADR, IMDG, IATA	Not regulated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Not regulated

15 Regulatory information

 $\cdot \textit{Safety, health and environmental regulations/legislation specific for the substance or \textit{mixture}}\\$

· Sara

· Section 355	(extremely hazardous substances):	
50-14-6	ergocalciferol	
10102-18-8	Sodium Selenite	
· Section 313	(Specific toxic chemical listings):	
598-62-9	Manganese Carbonate	
3486-35-9	Zinc Carbonate	
12069-69-1	Cupric Carbonate	
10102-18-8	Sodium Selenite	
· TSCA (Toxi	c Substances Control Act):	
57-50-1	Sucrose	ACTIVE
9005-25-8	Corn Starch	ACTIVE
9000-71-9	Casein	ACTIVE
9004-34-6	Alphacel	ACTIVE
8001-30-7	Corn Oil	ACTIVE
7757-93-9	Calcium Phosphate Dibasic	ACTIVE
67-48-1	choline chloride	ACTIVE
7647-14-5	Sodium Chloride	ACTIVE
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	L-Ascorbic Acid	ACTI
	potassium sulphate	ACTI
	magnesium oxide	ACTI
	DL-alpha-Tocopherol Acetate	ACTI
	silicon dioxide, chemically prepared	ACTI
	D-myo-Inositol	ACTI
	p-Aminobenzoic Acid	ACTI
	nicotinic acid	ACTI
	D-Pantothenic Acid Calcium Salt	ACTI
	Manganese Carbonate	ACTI
	Menadione	ACTI
	Vitamin A Acetate	ACTI
	Vitamin B12	ACTI
	Zinc Carbonate	ACTI
	riboflavin	ACTI
	Pyridoxine Hydrochloride	ACTI
	Thiamine Hydrochloride	ACTI
	Cupric Carbonate	ACTI
	Folic Acid	ACTI
	ergocalciferol	ACTI
	Gum Arabic	ACTI
58-85-5	D-Biotin	ACTI
· Hazardous	Air Pollutants	
598-62-9	Manganese Carbonate	
10102-18-8	Sodium Selenite	
· Proposition		
· Chemicals I	known to cause cancer:	
None of the	ingredients is listed.	
· Chemicals I	known to cause reproductive toxicity for females:	
None of the	ingredients is listed.	
· Chemicals I	known to cause reproductive toxicity for males:	
	ingredients is listed.	
	known to cause developmental toxicity:	
	ingredients is listed.	
	•	
•	~	
· Carcinogen	onmental Protection Agency	
· Carcinogen · EPA (Envir	onmental Protection Agency)	
· Carcinogen · EPA (Envir 598-62-9	Manganese Carbonate	
• Carcinogen • EPA (Envir 598-62-9 10102-18-8	Manganese Carbonate Sodium Selenite	
• Carcinogen • EPA (Envir 598-62-9 10102-18-8 • TLV (Thres	Manganese Carbonate Sodium Selenite hold Limit Value established by ACGIH)	
• Carcinogen • EPA (Envir 598-62-9 10102-18-8 • TLV (Thres 57-50-1	Manganese Carbonate Sodium Selenite hold Limit Value established by ACGIH) Sucrose	
Carcinogen • EPA (Envir 598-62-9 10102-18-8 • TLV (Thres 57-50-1	Manganese Carbonate Sodium Selenite hold Limit Value established by ACGIH)	

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Quality Control Dept.
- · Date of preparation / last revision 04/25/2019 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

US