

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** AIN-93M Mineral Mix
- **Article number:** 960401
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
United States
www.mpbio.com
- **Information department:** Product safety department
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazards identification

- **Classification of the substance or mixture**
The product is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
The product does not have to be labelled due to the calculation procedure of international guidelines.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.
- **Code letter and hazard designation of product:**

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



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

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

57-50-1	sucrose, pure		20-30%
1309-48-4	magnesium oxide		1-10%
6834-92-0	disodium metasilicate	⚠ Skin Corr. 1B, H314; ⚠ STOT SE 3, H335	1-10%
471-34-1	calcium carbonate		30-40%

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:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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** Not required.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.

(Contd. on page 3)

USA

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 2)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15-30°C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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 item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

471-34-1 calcium carbonate

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **respirable fraction
TLV	TLV withdrawn

57-50-1 sucrose, pure

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ *total dust **respirable fraction
TLV	10 mg/m ³

1309-48-4 magnesium oxide

PEL	15* mg/m ³ fume; *total particulate
TLV	10* mg/m ³ *as inhalable fraction

- **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.

(Contd. on page 4)

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 3)

· Eye protection: Not required.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid
Color: According to product specification

· **Odor:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not determined.

· Ignition temperature:

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· **Vapor pressure:** Not applicable.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

· Solvent content:

Organic solvents: 0.0 %

Solids content: 100.0 %

· **Other information** No further relevant information available.

USA

(Contd. on page 5)

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 4)

10 Stability and reactivity

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **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 (International Agency for Research on Cancer)**

3333-67-3	nickel carbonate	I
-----------	------------------	---

- **NTP (National Toxicology Program)**

3333-67-3	nickel carbonate	K
-----------	------------------	---

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.
- **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:** Smaller quantities can be disposed of with household waste.

(Contd. on page 6)

USA

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 5)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | - |
| · UN proper shipping name | - |
| · Transport hazard class(es) | - |
| · Packing group | - |
| · 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. |

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

13410-01-0	Sodium selenate
------------	-----------------

· **Section 313 (Specific toxic chemical listings):**

13410-01-0	Sodium selenate
------------	-----------------

7803-55-6	ammonium trioxovanadate
-----------	-------------------------

· **TSCA (Toxic Substances Control Act):**

471-34-1	calcium carbonate
----------	-------------------

7778-77-0	potassium dihydrogenorthophosphate
-----------	------------------------------------

57-50-1	sucrose, pure
---------	---------------

7647-14-5	sodium chloride
-----------	-----------------

7778-80-5	potassium sulphate, containing in the drystate more than 52 per cent by weight of K2O
-----------	---

866-83-1	potassium dihydrogen 2-hydroxypropane-1,2,3-tricarboxylate
----------	--

1309-48-4	magnesium oxide
-----------	-----------------

3486-35-9	Zinc Carbonate
-----------	----------------

6834-92-0	disodium metasilicate
-----------	-----------------------

598-62-9	manganese carbonate
----------	---------------------

12069-69-1	copper(II) carbonate--copper(II) hydroxide(1:1)
------------	---

10141-00-1	Chromium(III) potassium sulfate
------------	---------------------------------

10043-35-3	boric acid
------------	------------

7681-49-4	sodium fluoride
-----------	-----------------

3333-67-3	nickel carbonate
-----------	------------------

(Contd. on page 7)

Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 10/24/2012

Reviewed on 10/24/2012

Trade name: AIN-93M Mineral Mix

(Contd. of page 6)

· **Proposition 65**

· **Chemicals known to cause cancer:**

3333-67-3	nickel carbonate
-----------	------------------

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

598-62-9	manganese carbonate	D
----------	---------------------	---

· **TLV (Threshold Limit Value established by ACGIH)**

57-50-1	sucrose, pure	A4
1309-48-4	magnesium oxide	A4
10043-35-3	boric acid	A4
7681-49-4	sodium fluoride	A4
3333-67-3	nickel carbonate	A1
13106-76-8	ammonium molybdate(VI)	A3

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

3333-67-3	nickel carbonate
-----------	------------------

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· **Hazard symbols:**

· **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 MSDS:** Product safety department

· **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)