

Version 1

Reviewed on 11/22/2017

1 Identification

- · Product identifier
- · Trade name: **BIO-MARROW**TM Medium, without conditioned medium
- · Article number: 01-199-1
- \cdot Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Biological Industries Israel Beit Haemek Ltd. BEIT HAEMEK 25115 ISRAEL michalb@bioind.com
- · Information department: Product safety department.
- Emergency telephone number: During normal opening times: +972/4/9962467

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)



· HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	<i>Reactivity</i> =

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

3 Composition/information on ingredients

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- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

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.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 Fire-fighting 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:
- Not required.
- Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: No special measures required.
- · 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.

7 Handling and storage

- · Handling:
- Precautions for safe handling No special measures required.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: (-10) (-20) °C
- · 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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.

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(Contd. of page 2) *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.

Physical and chemical property					
· Information on basic physical and chemical properties					
General Information Appearance:					
Form:	Liquid				
Color:	Red				
• 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 applicable.				
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 at 20 •C (68 •F):	23 hPa (17 mm Hg)				
Density:	Not determined.				
· Relative density	Not determined.				
· Vapour density	Not determined.				
• Evaporation rate	Not determined.				
· Solubility in / Miscibility with					
Water:	Fully miscible.				
· Partition coefficient (n-octanol/wate	r): Not determined.				
· Viscosity:					
Dynamic:	Not determined.				
Kinematic:	Not determined.				
Solvent content:					
Organic solvents:	0.0 %				

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Water: • Other information >98 % No further relevant information available.

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.
- \cdot on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- \cdot 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)

7647-01-0 hydrogen chloride

150-13-0 4-aminobenzoic acid

· NTP (National 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.

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· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation: Smaller quantities can be disposed of with household waste.

· Uncleaned packagings:

• **Recommendation:** Disposal must be made according to official regulations.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number		
DOT, ADN, IMDG, IATA	not regulated	
UN proper shipping name DOT, ADN, IMDG, IATA	not regulated	
Transport hazard class(es)		
DOT, ADN, IMDG, IATA		
Class	not regulated	
Packing group		
DOT, 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'':	-	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances):					
7647-01-0 hydrogen chloride					
· Section 313 (Specific toxic chemical listings):					
7647-01-0	hydrogen chloride				
13477-34-4	Calcium nitrate tetrahydrate				
· TSCA (Toxi	· TSCA (Toxic Substances Control Act):				
7365-45-9	4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid				
7647-14-5	sodium chloride				
50-99-7	glucose				
144-55-8	sodium hydrogencarbonate				
7558-79-4	disodium hydrogenorthophosphate				
56-85-9	levoglutamide				
7447-40-7	potassium chloride				
7647-01-0	hydrogen chloride				
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Safety Data Sheet acc. to OSHA HCS

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		(Contil of more 5)					
61-90-5	L-leucine	(Contd. of page 5)					
73-32-5	L-isoleucine						
56-89-3	cystine						
34487-61-1	sodium hydrogen 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bisphenolate S,S-dioxide						
657-27-2	lysine hydrochloride						
87-89-8	myo-inositol						
56-45-1	L-serine						
· Proposition	65						
· Chemicals k	cnown to cause cancer:						
None of the	ingredients is listed.						
· Chemicals k	nown to cause reproductive toxicity for females:						
None of the	ingredients is listed.						
· Chemicals k	nown to cause reproductive toxicity for males:						
None of the	None of the ingredients is listed.						
· Chemicals k	nown to cause developmental toxicity:						
None of the	ingredients is listed.						
· Carcinogen	ic categories						
-	onmental Protection Agency)						
None of the	ingredients is listed.						
· TLV (Thres	• TLV (Threshold Limit Value established by ACGIH)						
7647-01-0	hydrogen chloride	A4					
· NIOSH-Ca	(National Institute for Occupational Safety and Health)						
None of the	None of the ingredients is listed.						
	lements Void						
• Hazard pict							
· Signal word							
· 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: Product safety department.

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

- ELINES: 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)

[·] Contact: Ms. BADICHI GITLIN

[·] Date of preparation / last revision 11/22/2017 / -

[•] Abbreviations and acronyms: