

CAT. No. 012 MI-AC-948 Version 7 Date: 15/04/2020 According to NOM-018-STPS-2015:

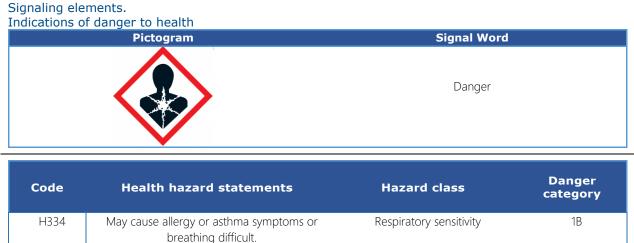
SECTION I. MANUFACTER AND SUBSTANCE IDENTIFICATION					
Substance name: Granular Hemoglobin.	Manufacturer name: Biotecnica Internacional S.A. de C.V.	Emergency telephone: 951 512 80 04			
Other ways of identification: Data not available.	Address: Artículo 123 no. 104 col. Huertos y Granjas de Brenamiel, San Jacinto Amilpas, Oax. Oaxaca, México. C.P. 68285	Technical telephone: 951 512 62 55 951 512 80 04			
Use and restriction: Use in culture media, fermentation processes, cell cultures and other biotechnological applications.	Data prepared: 14/08/2008	Update: 21/11/2018			

SECTION II. HAZARD IDENTIFICATION

Classification of the substance or mixture:

This substance is not classified according to the GHS. It is not classified as hazardous according to ECHA in the REACH registers (EC Regulation No. 1907/2006). No hazardous ingredients according to OSHA 29 CFR 1910.1200.

Signal word, hazards statement and precautionary statements:



Precautionary Statement:

Prevention: P201 Obtain special instructions before use.

Prevention: P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

Response: P304 + P312 IF INHALED, call a POISON CENTER or doctor/physician if you feel unwell.

Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: P402 + P404 + P235 Store in a dry and cool place. Store in a closed container.

Disposal: P501 Remove the remaining and the container; contact a professional service for the disposal of this material.

Other hazards that do not contribute to the classification:

If extremely high levels of dust are generated in the air, the material can support combustion.



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SECTION III. COMPOSITION/INFORMATION ABOUT COMPONENTS

Substance name: Granular Hemoglobin. **UN number**: Not applicable. This product does not contain hazardous ingredients.

SECTION IV. FIRST AID

First aid procedures:

Inhalation: Provide fresh air. Seek medical help if necessary.

In case of contact with eyes: Flush with pressured water for at least 15 minutes, if irritation develops, seek medical help. In case of contact with skin: Wash immediately with soap and water, rinsing well.

Ingestion: If swallowed, rinse mouth and throat with water. Drink water. Seek medical advice if necessary.

Symptoms and health hazards:

Acute.

Allergy symptoms are runny nose, cough, sneezing, languor, mild attack of fever. Contact with dust can cause irritation of sensitive skin and eyes.

Chronic.

Undetermined.

Indication of any immediate medical attention and special treatment needed:

If you have any symptoms described above, seek medical advice (show the label if possible).

SECTION V. FIRE MEASURES

Extinguishing medias:

Water, appropriate foam, carbon dioxide (CO₂), dry chemical powder.

Specific substance hazards:

Any organic powder can be potentially explosive if disbursed certain concentrations. Concentrations have not been determined for these procedures.

Special fire-fighting procedures:

Data not available.

Hazardous decomposition products:

Carbon monoxide. Carbon dioxide.



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SECTION VI. MEASURES TO BE TAKEN IN CASE OF SPILL OR ACCIDENTAL LEAKAGE

Personal precautions:

Avoid formation of dust.

Protective equipment:

See section VIII. Emergency procedures:

Evacuate unnecessary personal.

Environmental precautions:

Do not let the product enter sewage system.

Cleaning procedures:

If a spill occurs: The spilled product should be removed immediately to prevent dust formation. Aspirate or moisten gently with water and collect in a sealable container for disposal. Rinse the spill area with plenty of water (low pressure). Avoid the formation of aerosols and powders.

SECTION VII. HANDLING AND STORAGE

Cautions for safe handling

Do not breathe dust, avoid contact with skin and eyes. Wash your hands and exposed areas with mild soap and water after using the material.

Provide good ventilation in the handling area to prevent dust buildup.

Store conditions, incompatibility:

Store in a clean, cool and dry place, in a ventilated place. Recommended storage temperature that does not exceed 30 ° C and that the relative humidity does not exceed 70%.

SECTION VIII. EXPOSURE MEASURES/PERSONAL PROTECTION

Control parameters:

The occupational exposure limits are not available.

Technical controls:

No additional data. See Section VII.

Respiratory protection:

Wear face masks under normal conditions of use, or NIOSH N95 (US) industrial respirator, type FFP1 (EN143) or equivalent, if deemed necessary by a risk assessment.

Protective gloves:

Protective gloves: It is not required under normal conditions of use, or use Nitrile protective gloves that meet the European Union specification 89/686/EEC, the standard EN374 or equivalent if a risk assessment considers it necessary.

Eye protection:

Use safety glasses approved by ANSI Z87, EN 166, or equivalent if deemed necessary by a risk assessment.

Safety clothing:

Wear suitable protective clothing in accordance with good chemical hygiene practices.



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SECTION IX. PHYSICAL AND CHEMICAL DATA			
Appearance and odor: Granular powder of a dark reddish brown color (almost black) and free of foreign particles.	Relative density: Not determined.		
pH: 7.80 – 8.60	Solubility in water: 20 g/l		
Melting Point / Freezing Point: Not determined.	Partition coefficient n-octanol / water: Not applicable.		
Initial point and boiling range: Not determined.	Spontaneous ignition temperature: Not applicable.		
Flammability point: Not determined.	Decomposition temperature: Not determined.		
Evaporation rate: Not applicable.	Viscosity at 40 ° C (mm ² / s): Not applicable.		
Flammability (solid, gas): Not determined.	Average molecular weight: Data not available.		
Vapor pressure (mmHg): Not applicable.	Explosive properties: Not determined.		
Vapor density (air = 1): Not applicable.	Loss in drying: Maximum 6.00%.		

SECTION X. STABILITY AND REACTIVITY

Reactivity:

Not established.

Chemical stability:

Stable under recommended storage conditions.

Possibility of hazardous reactions: Not established.

Conditions to avoid:

Direct sunlight, source of ignition. Avoid humid or very warm places.

Incompatible materials:

Strong acids. Strong bases.

Hazardous decomposition products:

Fumes. Carbon monoxide. Carbon dioxide.



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SECTION XI. TOXICOLOGICAL INFORMATION

Signs and symptoms of exposure:

It can cause irritation of the respiratory tract, skin and eyes. Risks are unlikely with proper handling, respecting safety practices.

Acute toxicity estimates:

Not Classified.

Specific toxicity in certain organs:

Not Classified.

Pathways of entry (See section II):		Skin: Yes	
		Eyes: Yes	
		Inhalation: Yes	
		Ingestion: Yes	
Carcinogenicity: Not listed in the NTP report	IARC monographs: Not listed.		OSHA 1910.1002: Not listed.

Interactive effects: Data not available.

SECTION XII. ECOTOXICOLOGICAL INFORMATION

Toxicity: This product is not hazardous to the environment according to US regulations.

Persistence and Biodegradability: Information not available.

Bioaccumulation potential: Information not available.

Mobility on the ground: Information not available.

PBT and vPvB: The substance does not meet the criteria to be identified as PBT substance or vPvB according to Annex XIII of the REACH regulation.

Other adverse effects: Has not been evaluated.

SECTION XIII. INFORMATION RELATING TO THE DISPOSAL OF THE PRODUCTS

Contact a licensed professional waste disposal service to dispose of this material. Avoid release to the environment or enter the sewage system. Check all local environmental regulations, estate and federal. See section VIII.



GRANULAR HEMOGLOBIN CAT. No. 012 **MI-AC-948** Version 7 Date: 15/04/2020 According to NOM-018-STPS-2015: SECTION XIV. INFORMATION CONCERNING TRANSPORTATION **UN Number:** Not Applicable. **Official Transport Designation of UN:** Not Applicable. Hazards in transportation: Not Applicable. IATA: Non-Hazardous for Air Transportation. ADR/RID: Non-Hazardous for Road Transportation. IMDG: Non-Hazardous for Sea Transportation. **Environmental Risks:** Have not been thoroughly investigated, but currently none have been identified **Special Precautions for Users:** Not Classified. Transport In Bulk According To Annex II of Marpol 73/78 and the IBC Code:

Not Classified.

SECTION XV. REGULATORY INFORMATION

Not applicable.

SECTION XVI. OTHER INFORMATION

The information is considered correct, but is not exhaustive and will be used only as guidance, which is based on the current knowledge of the chemical or mixture and is applicable to the appropriate safety precautions for the product.



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Abbreviations or acronyms:

EC: European Inventory of Existing Chemical Substances.

UN Number: Number of four digits used to identify hazardous substances or materials.

NIOSH: National Institute of Occupational Safety and Health of the United States.

FFP1: Level of protection of a mask according to the European standard EN 14.

IN: European Standard.

ANSI: American National Standards Institute.

NTP: National Toxicology Program of the United States.

IARC: International Agency for Research on Cancer.

OSHA: Occupational Safety and Health Administration in the United States.

PBT: Persistent, Bioaccumulative and Toxic.

vPvB: Very persistent and very Bioaccumulable.

REACH: Registration, Evaluation, and Authorization and Restriction of Chemical substances of the European community.

IATA: International Air Transport Association.

ADR / RID: European Agreement on the International Carriage of Dangerous Goods by Road / European Agreement on the International Carriage of Dangerous Goods by Rail.

IMDG: International Maritime Dangerous Goods Code.

MARPOL: International Convention for the Prevention of Pollution from Ships.

CIQ: International Code of Chemotherapy.

ECHA: European Chemicals Agency for Chemical Substances and Mixtures.

TSCA: Toxic Substances Control Act Chemical Substance Inventory contains all existing chemical substances manufactured, processed or imported into the United States.

GHS: Globally Harmonized System.