

The reference number for this MSDS document is 041109-B.

substance **geniaBeads[®] CA orange**

version Global

date approved **February 16th, 2005**

This document has been prepared to meet the requirements of the EU directive, 91/155/EEC and other regulatory requirements.

0 Introduction

The material is not classified as hazardous according to criteria of National Occupational Health and Safety Commission (Australia).

1 Identification of the preparation and company

Identification of the preparation:

The preparation is labeled with product code B-ORxxxxCAxx (wherein 'x' represents a single letter or figure) in addition to geniaLab's name. Further information regarding the specific composition may be added. The product is usually stored in a wet environment.

Company identification:

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2 Information on the ingredients

Description:

Hydrogel beads formed by ionic gelation of sodium alginate with calcium ions and containing pigment, turbidity obtaining substance and preservative.

Components:

- | | |
|--|--------|
| (a) sodium alginate | <10% |
| CAS-no. 9005-38-3 | |
| EC-Class: not classified as dangerous | |
| (b) calcium chloride | <5% |
| EINECS-no. 233-140-8 | |
| CAS-no. 10035-04-8 | |
| EC-Class: not classified as dangerous | |
| (c) titanium dioxide | <0.5% |
| EINECS-no. 236-675-5 | |
| CAS-no. 13463-67-7 | |
| EC-Class: not classified as dangerous | |
| (d) Pigment Yellow 1 | <0.2 % |
| (2-[(4-methyl-2-nitrophenyl)azo]-3-oxo-N-phenylbutyramide, C.I. 11680) | |
| EINECS-no. 219-730-8 | |
| CAS-no. 2512-29-0 | |
| (e) Pigment Red 5 | <0.2 % |
| (N-(5-chloro-2,4-dimethoxyphenyl)-4-[[5-[(diethylamino)sulphonyl]-2-methoxyphenyl]azo]-3-hydroxynaphthalene-2-carboxamide, C.I. 12490) | |

EINECS-no. 229-107-2

CAS-no. 6410-41-9

(f) preservative <0.5 %

solution consisting of

1,2-benzisothiazol-3(2H)-one 2.5 – 10 %

EINECS-no. 220-120-9

CAS-no. 2634-33-5

EC-Class: **X_n**, **N**, R22 R38 R41 R43 R50

2-methyl-2H-isothiazol-3-one 2.5 – 10 %

EINECS-no. 220-239-6

CAS-no. 2682-20-4

EC-Class: **C**, **N**, R20/22 R34 R43 R50

These EC-Classes do not apply for the product (see section 15).

The substances mentioned above do not react with each other but remain in their original form in the mixture with merely physical interactions. According to this the product is considered to be of no harm to man or environment.

3 Hazards identification

Particular danger to man and environment are not expected according to present knowledge.

4 First aid measures

After skin contact: wash with water

After eye contact: rinse opened eye with plenty of water to remove beads

After swallowing: no ill effects are expected based on LD₅₀ for single substances. If feeling unwell consult a medical doctor.

5 Fire-fighting measures

The product is not combustible in the usual wet, hydrogel state.

6 Accidental release measures

Sweep up the spilled material and dispose of in accordance with the waste disposal method that complies with all applicable local, state, and federal laws, rules, regulations and standards. Entry to the waste water system is non-critical for smaller amounts.

7 Handling and storage

Always use safe lifting techniques when manually moving bags, especially when handling containers weighing more than 50 pounds (22.7 kg).

To protect quality, store in tight bags or containers. Permanent exposure to light should be obviated for reducing eventual losses in pigment intensity. To avoid microbial spoilage, the addition of a suitable preservative is strongly recommended. Storage at room temperature will lead to degradation and deterioration of the product, refrigerating will just lead to a delay but not prevent this.

8 Exposure controls, personal protection

No special requirements regarding eye-protection or breathing equipment exist. Use of protection gloves is recommended.

9 Physical and chemical properties

| | |
|-----------------------------|-----------------------------------|
| <i>Odor:</i> | almost odorless |
| <i>Appearance:</i> | small soft colored hydrogel beads |
| <i>Volatility:</i> | not available |
| <i>Boiling point:</i> | not available |
| <i>Melting point:</i> | not available |
| <i>Danger of explosion:</i> | none |
| <i>Density:</i> | ~1.0 g/cm ³ |

Solubility in water: negligible

10 Stability and reactivity

The product is stable at the designated conditions. It will deteriorate in presence of chelating substances, e.g. citrate, phosphate, or EDTA. Longer term storage in deionized water or aqueous solutions with high concentration of mono-valent ions, e.g. sodium or potassium will also lead to deterioration.

To avoid microbial spoilage, a suitable preservative is added. Nonetheless, prolonged storage at room temperature may lead to degradation and deterioration of the product and refrigerating will just lead to a delay but not prevent this.

Reactivity was not determined yet but considerable inactivity can be assumed.

11 Toxicological information

No toxicological tests were undertaken yet. All components except the pigment are designated ingredients for food. The LD₅₀ for the pure pigment is >2,000 mg/kg (rat). The pigment is included at only <0.2 wt% in the product. Irritating effects on skin and eyes (rabbit) were determined as void even for the pure pigment.

12 Ecological Information

No detailed studies were done on the product yet. From the nature of the included components it can be strongly expected that the product is fully biodegradable or inert.

13 Disposal considerations

No special disposal methods are suggested. It is the user's responsibility to comply with all applicable local, state, and federal laws, rules, regulations and standards.

14 Transport information

Not dangerous according to the above specifications.

15 Regulatory information

According to EU directive 88/379/EEC, Annex 1, no risk classification applies to the product based on the risk classifications and contents of the single compounds (see section 2). It is expressly declared that this is a product with very restricted circulation.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing sheet: Product development

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