MATERIAL SAFETY DATA SHEET (MSDS)

General Health Profile

I. Product and Company Identification

Product Name: General Health Profile

Details of the supplier of the safety data sheet

Supplier: For Heska Corporation

Address: Hi-tech Zone, 611731 Chengdu, Sichuan, China

Telephone No: +86 28 69760308 Telefax No: +86 28 69760307

II. Hazard Identification

OSHA Hazards: No known OSHA hazards

GHS Hazards: Not a dangerous or hazardous substance or preparation

according to the Global Harmonized System (GHS).

P308 + P313 If exposed or concerned: Get medical advice/attention

HMIS Ranking:

Health hazard 1
Flammability 0
Physical hazards 0

NFPA Rating:

Health hazard 1
Fire 0
Reactivity hazard 0

Potential Health Effects:

Inhalation May cause respiratory tract irritation

Skin May cause skin irritation
Eyes May cause eye irritation

III. Composition/Information on Ingredients

This product consists of reagent beads comprised of a mixture of low hazard lyophilized chemical beads enclosed in a plastic rotor. These beads are in concentrations not associated with human or environmental toxicity, which contain among the listed items, enzymes, preservatives and stabilizers in concentrations under 1%. Each rotor contains a cup of diluent containing less than 0.5 ml of water and preservatives in concentrations of less than 1%. Table 1 below lists the chemicals present in the panel.

TABLE 1

| Ingredient | CAS# | Contents(mg) |
|---|-------------|--------------|
| Horseradish Peroxidase (HRP) | 9003-99-0 | 0.004 |
| Creatinase/Creatin aminohydrolase | 37340-58-2 | 0.02 |
| Sarcosine oxidase (SOX) | 9029-22-5 | 0.07 |
| Sodium 3-[Ethyl(m-tolyl)amino]-2-hydroxy-1-propanesulfonate | 82692-93-1 | 0.08 |
| 4-aminoantipyrine | 83-07-8 | 0.05 |
| Creatininase/Creatinin aminohydrolase | 9025-13-2 | 0.05 |
| α -amylase | 9000-90-2 | <0,001 |
| 2-Chloro-4-nitrophenyl 4-O-b-D-galactopyranosyl-maltoside | 157381-11-8 | 0.2 |
| 8-Hydroxy quinolone-5-sulfonic acid | 84-88-8 | 0.1 |
| Arsenazo III | 1668-00-4 | 0.02 |
| Adenosine triphosphate, Na-salt (ATP) | 987-65-5 | 0.1 |
| Nicotinamide adenine dinucleotide phosphate oxidized (NADP) | 24292-60-2 | 0.08 |
| glucose | 14431-43-7 | 0.5 |
| hexokinase | 9001-51-8 | <0,0001 |
| Glucose-6-phospate dehydrogenase | 9001-40-5 | <0,0001 |
| Inosine | 58-63-9 | 0.2 |
| purine nucleoside phosphorylase | 9030-21-1 | 0.002 |
| Malate dehydrogenase (MDH) | 9001-64-3 | 0.005 |
| 4-(2-ethoxy)-1-Piperazine sulfonic acid (HEPES) | 7365-45-9 | 0.1 |
| Tris(hydroxymethyl)amino methane (Tris) | 77-86-1 | 3 |
| L-Aspartic acid | 56-84-8 | 2 |
| Magnesium sulfate septahydrate | 10034-99-8 | 0.02 |
| 4-p-nitrophenyl phosphate (4-NPP) | 4264-83-9 | 0.1 |
| Piperazine-1,4-Two sulfonic acid (PIPES) | 5625-37-6 | 2 |

| L-Alanine | 56-41-7 | 2 |
|---|-------------|-------|
| Copper sulfate pentahydrate | 7758-99-8 | 0.2 |
| Potassium sodium tartrate hydrate | 6381-59-5 | 0.8 |
| Potassium iodide | 7681-11-0 | 0.2 |
| Disodium hydrogen phosphate dodecahydrate | 10039-32-4 | 1 |
| Bilirubin oxidase | 80619-01-8 | 0.03 |
| Bromo cresol green | 76-60-8 | 0.07 |
| Succinic acid | 110-15-6 | 3 |
| N-Glycylglycine | 556-50-3 | 3 |
| L-r-Glutamine carboxyl-4-Phenyl diazotriate | 63699-78-5 | 0.1 |
| Cholesterol esterase | 9026-00-0 | 0.05 |
| Lipoprotein lipase | 9004/2/8 | 0.001 |
| Glycerol dehydrogenase | 9028-14-2 | 0.004 |
| Malate dehydrogenase (MDH) | 9001-64-3 | 0.01 |
| Phospoenolpuruvate carboxylase (PEP-C) | 9067-77-0 | 0.01 |
| 3-Acetylpyridine adenine dinucleotide, reduced form (APADH) | 102029-93-6 | 2 |

IV. First Aid Measures

In case of eye contact: Flush eyes with copious amounts of water for a minimum of 15 minutes

In case of inhalation: Allow the victim to rest in a well-ventilated area. Seek immediate medical attention

In case of skin contact: Flush exposed skin with copious amounts of water for a minimum of 15 minutes

In case of ingestion: Contact a physician in case of ingestion

V. Fire-Fighting Measures

No flammable properties are associated with this product.

Extinguishing media: Use water spray, dry chemical or carbon dioxide

<u>Hazardous combustion</u> May result in the formation of nitrogen and carbon

products: oxides

<u>Special protective</u>: Wear self-contained breathing apparatus for firefighting

equipment for firefighters: if necessary

<u>Additional information:</u> Combustion of the plastic rotor containing this preparation

may result in toxic particulates and gases

VI. Accidental Release Measures

Personal precautions:

Eve Protection Wear safety goggles or a face shield when cleaning up spills Skin Protection

Wear protective attire that prevents contamination of skin

and personal clothing

Hand Protection Wear nitrile or vinyl gloves that cover exposed skin

Other Protections Avoid breathing mists, dusts, and aerosols Prevent spilled product from entering drains **Environmental Controls:**

Spill Clean-up Measures: Contain the material to prevent it from becoming airborne Place

absorbent material on top of, and around the perimeter of the

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Sweep up the spilled material and decontaminate the area

with soap and water or an equivalent cleaner

VII. Handling and Storage

This product is to be stored inside its packaging at 2-8°C in a cool, dry location. Wear gloves when handling the product and wash hands after removing gloves.

VIII. Exposure Controls/Personal Protection

None of the chemicals in this preparation are assigned occupational exposure limits. This product can be safely handled under normal conditions with no controls.

Engineering Controls: Provide ventilation in work areas where this product is

handled

Personal Protective Safety glasses and chemical-resistant gloves

recommended Equipment:

IX. Physical and Chemical Properties

Physical state: Solid. Spherical lyophilized beads are enclosed in a

sealed plastic package

Multi-colored beads Color:

Odor: Odorless

Odor threshold: None established **Chemical Properties:** None available for

pH, Melting point

 Boiling point Flash point

Lower Explosive Limit Upper Explosive Limit

Vapor pressure

Vapor density (air=1)

Density (q/cm3)

Water solubility (20°C in g/l)

• Auto ignition temperature

X. Stability and Reactivity

Reactivity: This preparation is not known to be reactive violently Chemical Stability: This preparation is known to be chemically stable

<u>Thermal Decomposition</u>: Will decompose when burned

<u>Conditions to Avoid</u>: Sunlight, heat (temperatures above 32°C)

Incompatible Materials: No data available

Hazardous Decomposition

Products: No harmful decomposition products known

Storage Conditions: Store under dry, in a cool (2-8°C), dry location

XI. Information on basis physical and chemical properties

| Property | Value |
|---------------------------------|-------------------------------|
| Phisical state | solid |
| Odour | None |
| Odour threshold: | Not applicable |
| Flash point: | Not applicable |
| Evaporation rate: | Not applicable |
| Flammability(solid, gas): | Not applicable |
| Upper/lower flammability or | Non explosive |
| explosive limits: | |
| Vapor density: | Not applicable |
| solubility in water | Insoluble. |
| Solubility in organic solvents: | insoluble in organic solvents |
| Partition coefficient n- | Not applicable |
| octanol/water: | |
| Auto-ignition temperature: | Not applicable |
| Decomposition temperature: | Not applicable |
| Viscosity: | Not applicable |
| Explosive propeties: | Non explosive |
| Oxidizing properties: | No oxidizing properties |

XII. ECOLOGICAL INFORMATION

Ecotoxicity: N/A

Persistence and Degradability
Bioaccumulative Potential
Mobility in the Soil:

THERE IS NO DATA AVAILABLE FOR THIS PRODUCT
THERE IS NO DATA AVAILABLE FOR THIS PRODUCT
Additional Ecological Information:
THERE IS NO DATA AVAILABLE FOR THIS PRODUCT

XII. DISPOSAL CONSIDERATIONS

Waste Disposal:

FOLLOW ALL FEDERAL, STATE AND LOCAL REGULATIONS FOR NON-HAZARDOUS WASTE DISPOSAL.

XIV. TRANSPORT INFORMATION

DOT Classification: NOT REGULATED NOT REGULATED

XV. REGULATORY INFORMATION

This safety data sheet complies with the requirements of EU Regulations 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010.

XVI. Other information

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