Direct Enzymatic HbA1c
Calibrators, Controls and Blank Solution
Safety Data Sheet 1030

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

1.1. Product identifier
Product form Mixture
Product name Direct Enzymatic HbA1c Calibrators, Controls and Blank Solution
Product code DZ168A-CAL, DZ168A-CON, DZ168A-S0V

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet
Supplier: Diazyme Laboratories
12889 Gregg Court
Poway, CA 92064
T 858-455-4768

Authorized Representative:
MDSS GmbH
Schiffraben 41
Germany
(+49) 511-6262-8630

1.4. Emergency telephone number
Emergency number Contact your local health authority or poison control center in an emergency. Manufacturer contact number for the US is as follows: (858) 455-4768

SECTION 2 Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Not classified (for all components)

2.2. Label elements
GHS-US labeling
No labeling applicable (for all components)

2.3. Other hazards
No additional information available (for all components)

2.4. Unknown acute toxicity (GHS-US)
Not applicable

SECTION 3 Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture
Full text of H-phrases: see section 16

SECTION 4 First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact Wash skin with plenty of water.
First-aid measures after eye contact Rinse eyes with water as a precaution.
First-aid measures after ingestion Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.
SECTION 5 Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Reactivity The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters
Protection during firefighting Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures Ventilate spillage area.

6.1.2. For emergency responders
Protective equipment Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up Take up liquid spill into absorbent material.
Other information Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)
No additional information available

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Direct Enzymatic HbA1c Calibrators, Controls and Blank Solution</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls Ensure good ventilation of the work station.
Hand protection Protective gloves.
Eye protection Safety glasses.
Skin and body protection Wear suitable protective clothing.
Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls Avoid release to the environment.

SECTION 9 Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state Liquid
Direct Enzymatic HbA1c
Calibrators, Controls and Blank Solution
Safety Data Sheet 1030
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Color</th>
<th>Mixture contains one or more component(s) which have the following colour(s): Colourless</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour(s): Sweet odour Ether-like odour</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water Solubility in water of component(s) of the mixture: 0.015 g/100ml</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified
Skin corrosion/irritation Not classified
Serious eye damage/irritation Not classified
Direct Enzymatic HbA1c
Calibrators, Controls and Blank Solution
Safety Data Sheet 1030

Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

SECTION 12 Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming: No known ecological damage caused by this product.

SECTION 13 Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14 Transport information

Department of Transportation (DOT)
In accordance with DOT
Transport document description: UN1897 Tetrachloroethylene, 6.1, III
UN-No.(DOT): UN1897
Proper Shipping Name (DOT): Tetrachloroethylene
Hazard labels (DOT): 6.1 - Poison inhalation hazard

Packing group (DOT): III - Minor Danger
Marine pollutant: Yes (IMDG only)

DOT Packaging Non Bulk (49 CFR 173.xxx): 203
DOT Packaging Bulk (49 CFR 173.xxx): 241
## Direct Enzymatic HbA1c
### Calibrators, Controls and Blank Solution
#### Safety Data Sheet 1030

| DOT Special Provisions (49 CFR 172.102) | IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.  
T4 - 2.65 178.274(d)(2) Normal............. 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. |
| DOT Packaging Exceptions (49 CFR 173.xxx) | 153 |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | 60 L |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) | 220 L |
| DOT Vessel Stowage Location | A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel. |
| DOT Vessel Stowage Other | 40 - Stow “clear of living quarters” |

### Additional information
- **Other information**
  - No supplementary information available.

### ADR
- No additional information available

#### Transport by sea
- **UN-No. (IMDG)** 1897
- **Proper Shipping Name (IMDG)** TETRACHLORETHYLENE
- **Class (IMDG)** 6.1 - Toxic substances
- **Packing group (IMDG)** III - substances presenting low danger

#### Air transport
- **UN-No. (IATA)** 1897
- **Proper Shipping Name (IATA)** Tetrachloroethylene
- **Class (IATA)** 6.1 - Toxic Substances
- **Packing group (IATA)** III - Minor Danger

### SECTION 15 Regulatory information

#### 15.1. US Federal regulations
- No additional information available

#### 15.2. International regulations

##### CANADA
- No additional information available

##### EU-Regulations
- No additional information available

- **Classification according to Regulation (EC) No. 1272/2008 [CLP]**
  - Not classified

- **Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**
  - No additional information available

##### National regulations
- No additional information available

#### 15.3. US State regulations
- No additional information available
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Safety Data Sheet 1030
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SECTION 16 Other information

SDS US Diazyme

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.