1. Product Identification

Product names: HemaVision®-28Q
Catalog no’s.: HV01-28Q

Chemical names, common names: Not applicable

Product use: The kit is CE-marked and labeled IVD “For in-Vitro Diagnostic procedures”.

Synonyms: Not applicable

Manufacturer’s name: DNA Diagnostic A/S

Address: Voldbjergvej 14
DK-8240 Risskov
Denmark

Emergency phone: +45 8732 3050
Business phone: +45 8732 3050
Web: www.dna-diagnostic.com

2. Hazards identification

Classification of the substance or mixture according to 1272/2008 CLP
Not classified.

Label Elements 1272/2008 CLP
Not classified.

Other Hazards
The product does not meet the criteria for PBT or vPvB.

3. Composition / Information of Ingredients

This safety sheet describes the HemaVision®-28Q Kit.
The HemaVision®-28Q Kit consists of the following solutions:
cDNA reaction mix, 12 vials each with 42 µL
qPCR reaction mix, 276 vials each with 23 µL
RNase free H₂O, 2 vials each with 1 mL
These three product components contain no notifiable substances, but the following products have biological constituents, occupational limits or H-phrases.

cDNA reaction mix:

<table>
<thead>
<tr>
<th>CAS/EC-no.</th>
<th>REACH No</th>
<th>Name</th>
<th>Content%</th>
<th>Classification CLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>9068-38-6-</td>
<td>-</td>
<td>Reverse Transcriptase enzyme</td>
<td>-</td>
<td>Biological Constituent SDS data N/A according to generic limits in EU directive 1272/2008 CLP</td>
</tr>
<tr>
<td>56-81-5/200-289-5</td>
<td>-</td>
<td>Glycerol</td>
<td>&lt;10%</td>
<td>-</td>
</tr>
</tbody>
</table>

qPCR reaction mix:

<table>
<thead>
<tr>
<th>CAS/EC-no.</th>
<th>REACH No</th>
<th>Name</th>
<th>Content%</th>
<th>Classification CLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>9012-90-2-</td>
<td>-</td>
<td>Taq DNA Polymerase enzyme</td>
<td>-</td>
<td>Biological Constituent SDS data N/A according to generic limits in EU directive 1272/2008 CLP</td>
</tr>
<tr>
<td>56-81-5/200-289-5</td>
<td>-</td>
<td>Glycerol</td>
<td>&lt;10%</td>
<td>-</td>
</tr>
</tbody>
</table>

4. First aid measures

Emergency overview:

Water is the main component of all solutions.

Occupational exposure presents little or no health hazard. There are exposure limits for glycerol.

Eye:
Flush with water in eyewash for at least 15 minutes, holding eyelids open. Remove contact lenses, clean before re-use. Obtain medical attention if symptoms develop (redness, itching, etc.)

Skin:
Wash with plenty of soap and water for at least 15 minutes. Remove contaminated clothing, which may be washed for re-use. Obtain medical attention if symptoms develop (redness, itching, etc.).

Inhalation:
Remove person to fresh air. Obtain medical attention unless effects are mild and temporary.

Ingestion:
Give plenty of water, if conscious. If vomiting occurs naturally, wash out mouth. Be prepared to induce vomiting upon a physician's advice. Obtain medical attention if symptoms develop.

Note to Physician:
Treat symptomatically. No specific antidote.
Special note regarding Biological Constituents
The Biological Constituents of this product are known to be non-infectious and non-hazardous. When this product is used in conjunction with bodily fluids UNIVERSAL PRECAUTIONS SHOULD BE IMPLEMENTED.

Exposure limits:
No compounds in this product have defined exposure limits.

### 4. First Aid Measures

Basic hygiene should prevent any problems. If contact with this product leads to reddening, inflammation, or other skin or eye irritation, flush the exposures area with running water.

Remove any contaminated clothing, taking care not to contaminate eyes. If chemical is in eyes, open victim’s eyes while under gentle running water. Use sufficient force to open eye lids. Have the victim “roll” eyes. As per standard industrial practice, the recommended minimum flushing time is 15 minutes.

The victim should seek immediate medical attention if an adverse reaction has occurred. A copy of label and SDS should be given to the physician or health professional. If chemical is swallowed, and the victim is having a reaction to the product, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow.

**Eye:**
Flush with water in an eyewash for at least 15 minutes, holding eyelids open. Remove contact lenses, clean before re-use. Obtain medical attention if symptoms develop (redness, itching, etc).

**Skin:**
Wash with plenty of soap and water for at least 15 minutes. Remove contaminated clothing, which may be washed for re-use. Obtain medical attention if symptoms develop (redness, itching, etc.).

**Inhalation:**
Remove person to fresh air. Obtain medical attention unless effects are mild and temporary.

**Ingestion:**
Give plenty of water, if conscious. If vomiting occurs naturally, wash out mouth. Be prepared to induce vomiting upon a physician's advice. Obtain medical attention if symptoms develop.

**Note to Physician:**
Treat symptomatically. No specific antidote.

### 5. Fire Fighting Measures

**Fire extinguishing media**
This Product is not combustible. If this product is in the proximity of a fire, use fire extinguishing materials which are appropriate the materials which are involved in the fire, eg. powder, foam, CO₂ or water fog.
6. Accidental release measures

Personal Protective Equipment
Area ventilation is generally adequate. Chemical-resistant gloves should be worn. Wear standard safety goggles or glasses. All watertight materials and rubber materials offer adequate protection. Avoid contact with eyes and skin.

Spill cleanup
Absorb spill. Common absorbent materials should be effective. Deposit in appropriate containers for removal and disposal. Wash area with plenty of water.

Environmental precautions
Avoid discharge to lakes, streams, sewers, etc. Accidental releases may be subject to special reporting requirements and other regulatory mandates.

See also sections 8 and 13

7. Handling and storage

Storage temperature
Frozen, at minus 20 degrees Celsius.

Storage pressure
Ambient.

Handling procedures
Keep closed or covered when not in use.

Storage Procedures
Suitable for most general chemical storage areas. Protect from direct sunlight.

Specific end uses
This product should only be used for applications described in section 1.

8. Exposure controls, personal protection
Control parameters
Occupational exposure limits EH40 (Great Britain)

Contained in product components cDNA mix and qPCR mix

<table>
<thead>
<tr>
<th>CAS-no:</th>
<th>Name</th>
<th>Limits</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5</td>
<td>Glycerol, mist</td>
<td>10 mg/m3/8 hour TWA</td>
<td>-</td>
</tr>
</tbody>
</table>

DNEL/PNEC: -

Exposure controls
Appropriate technical measures:
Well-functioning area ventilation is generally adequate. No respiratory protection will be needed under normal operating conditions.

General information/hygiene measures:
Smoking, consumption of food or liquid, and storage of tobacco, food or liquid, are not allowed in the workroom. Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face. Make sure that eyewash and emergency showers are clearly marked. Avoid contact with eyes and skin.

Personal Protective Equipments
Only CE marked personal protection equipment should be used. Chemical-resistant gloves should be worn (EN 374).
Wear standard safety goggles or glasses (EN 166). No respiratory protection is needed.
Wear appropriate protective clothing.

9. Physical and chemical properties

For all components of the kit

Odor
None

Boiling point
100 degrees Celsius

Melting point or range
0 degrees Celsius

pH
Neutral
Vapor Density
Not established but similar to water

Specific gravity
1.0

Solubility in water
Yes

Vapor pressure, mm Hg at 20 degrees Celsius
Similar to water

Volatile
Not established

Evaporation rate (water=1)
Not established but similar to water

Viscosity
Not established but similar to water

Appearance and color
Colorless liquid, like water

How to detect this substance
There are no unusual properties. The product’s characteristics are very similar to those for water.

10. Stability and Reactivity

Reactivity
Stable under normal and recommended conditions.

Chemical Stability
Stable under recommended conditions for use and storage

Conditions to avoid
Any set of conditions, which should be avoided for water. Direct sunlight. Strong oxidizers and reducers. Strong acids and bases. Alkalimetals.

Materials with which substance is incompatible
This product is not compatible with substances which are incompatible with water. Otherwise not established.

Hazardous Decomposition Products
None known
Hazardous reactions
Not expected to occur

11. Toxicological information

Potential Health Effect
No long-term health effect from exposure to this product is presently known.

Specific target organ toxicity – single exposure
Not classified

Acute toxicity
Not classified

Serious eye damage/irritation
Not classified

Dermal/skin corrosion/irritation
Not classified

Inhalation/respiratory
Not classified

Oral/ingestion
Not classified

Aspiration hazard
Not classified

Specific target organ toxicity – single exposure
Not classified

Specific target organ toxicity – repeated exposure
Not classified

Carcinogenicity
Not classified

Reproductive toxicity
Not classified
**12. Ecological Information**

**Toxicity**
Not classified but avoid leakage to sewage system or surface water. Contained in products cDNA mix and qPCR mix: Glycerol: Daphnia – EC50 – 24h: >500 mg/l

**Environmental Fate (Degradation, Transformation, and Persistence)**
Bio-concentration is not expected to occur

**Bioaccumulative potential**
Contained in product constituent MMLV-RT (Reverse transcriptase), 1 vial, 20 µl. Glycerol: log Pow: -1.76

**Mobility in soil**
No data

**Result of PBT and vPvB assessment**
The product does not meet the criteria for PBT or vPvB

**Other adverse effects**
None known

**13. Disposal Considerations**

**Waste treatment methods**
Avoid discharge to drain and surface water. Collect spills and waste in closed leak-proof containers for disposal at the local hazardous waste site.

**EWC-code**
15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

**Contaminated packing**
Packaging which contains leftovers from the product must be disposed of in the same way as the product.

**14. Transport information**

**This product is not subject to transport regulations**

**UN Proper shipping name**
Not determined
UN number
Not determined

Transport Hazard class
Not determined

Environmental hazards - MP
Not determined

ID number
Not determined

Special precautions for the user: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and IBC code: Not applicable

15. Regulatory information

European Union.

United States.
TSCA: This product is solely for research and development purposes only. It may only be handled by technically qualified individuals.

Canada.
DSL/NDSL: Not determined.

16: Other information

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since DNA Diagnostic A/S cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.