Section 1 – Product and Company Identification

Manufacturer Information
Quidel Corporation
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Athens, OH 45701
Phone: 1.800.874.1517
Fax: 1.740.592.9820
Emergency #: 1.866.519.4752
Web: quidel.com
E-mail: qehs@quidel.com

Product Information
Product Name: D³ DFA Herpes Simplex Virus Identification and Typing Kit and Duo Pack (Catalog #: 01-090000, 01-090001)
Intended Use: Identification and typing kit intended for use in the qualitative detection of human herpes simplex virus type 1 and type 2 (HSV-1 and HSV-2) in cell cultures by immunofluorescence using fluoresceinated monoclonal antibodies (MAbs). Replacement reagents.
Components: HSV-1 DFA Reagent (01-095005), HSV-2 DFA Reagent (01-096005), HSV-1/HSV-2 Antigen Control Slides (01-00101), 40X PBS Concentrate (01-090025), and Mounting Fluid (01-002007b).

Section 2 – Hazards Identification

Emergency Overview

<table>
<thead>
<tr>
<th>Kit Component</th>
<th>OSHA Hazards</th>
<th>Target Organs</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>40X PBS Concentrate (Sodium Azide, 4%)</td>
<td>Toxic, Irritant</td>
<td>Eyes, Skin</td>
<td>Acute toxicity, Oral (Category 4) Acute aquatic toxicity (Category 3) Skin Irritation (Category 2) Eye Irritation (Category 2A) Chronic aquatic toxicity (Category 3)</td>
</tr>
</tbody>
</table>

GHS Classification and Label Elements

<table>
<thead>
<tr>
<th>Component</th>
<th>Pictogram</th>
<th>Hazard Statements</th>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>40X PBS Concentrate (Sodium Azide, 4%)</td>
<td>!</td>
<td>H302 Harmful if swallowed. H315 Causes skin irritation. H320 Causes eye irritation. H412 Harmful to aquatic life with long lasting effects.</td>
<td>P264 Wash hands thoroughly after handling. P273 Avoid release to the environment. P280 Wear protective gloves and safety glasses. P308+P313: If exposed or concerned – get medical advice/attention. P305+P351+P338: If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
</tbody>
</table>

Supplemental Hazard Statements
1. Sodium azide is used as a preservative (<0.1%) in the HSV-1 DFA Reagent, HSV-2 DFA Reagent and Mounting Fluid.
2. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Avoid disposal of this material down sanitary or industrial plumbing systems.
3. Sodium azide may be rapidly absorbed through the skin.
4. Evans Blue is used in the HSV-1 DFA Reagent and HSV-2 DFA Reagent at a concentration of <0.01%. Evans Blue is a possible carcinogen and may cause cancer (IARC Group 3).
5. HSV-1/HSV-2 Antigen Control Slides are microscope slides onto which cultured cells infected with herpes simplex virus type 1 and herpes simplex virus type 2 have been grown then fixed (killed) with acetone; a drying agent is included in the foil envelope to preserve antigen integrity; there is no residual acetone present.
6. Follow Universal Precautions when working with this kit.
Section 3 – Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>Chemical Name</th>
<th>CAS #</th>
<th>EINECS #</th>
<th>Conc. (%)</th>
<th>Component Volume</th>
<th>Chemical Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>40X PBS Concentrate</td>
<td>Sodium Chloride</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>&lt;36</td>
<td>25 mL</td>
<td>Acute Tox. 2; Acute Tox. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300 +H310, H373, H410</td>
</tr>
<tr>
<td></td>
<td>Sodium Azide</td>
<td>26628-22-8</td>
<td>247-852-1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting Fluid</td>
<td>Glycerol</td>
<td>56-81-5</td>
<td>200-289-5</td>
<td>60</td>
<td>7 mL</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: All of the above reagents, buffers, solutions or fluids are considered ‘Mixtures’.

Section 4 – First Aid Measures

General Advice
Move out of exposure area. Consult a physician. Show this safety data sheet to the doctor in attendance, as necessary.

*If inhaled:* Move the person to fresh air and support breathing as required.

*In case of skin contact:* Wash affected area with soap and water. Seek medical advice if irritation develops.

*In case of eye contact:* Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical attention.

*If swallowed:* Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical advice if irritation develops.

*Note to Physicians:* Treat symptomatically.

Section 5 – Fire Fighting Measures

General Advice
Only individuals properly trained and issued appropriate personal protective equipment should respond and attempt to extinguish a fire.

*Suitable Extinguishing Media:* For small fires, use dry chemical, water spray, carbon dioxide or alcohol-resistant foam.

*General Fire Hazards:* The components within this kit will not significantly contribute to the intensity of a fire.

*Hazardous Combustion Products:* No data available

*Fire Fighting Equipment:* Firefighters should wear full protective gear when responding to fires.

Section 6 – Accidental Release Measures

General Advice
Only individuals properly trained and issued appropriate personal protective equipment should respond and attempt to clean up a spill or release. Large spills of the solutions, controls or reagents contained within this kit are unlikely.

*Personal Precautions:* Use personal protective equipment, including protective gloves and safety glasses when cleaning up small spills of the solutions, controls or reagents within this kit. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Keep all unnecessary personnel away from the spill area.

*Materials and Methods for Clean-Up:* Soak up with inert absorbent material (e.g., paper towel, etc.). Thoroughly wash the area with soap and water after a spill or release clean-up.
Section 6 – Accidental Release Measures (cont’d)

**Recovery and Neutralization:** Collect spilled material and clean-up supplies and place in sealed container for disposal. Refer to Section 13 for disposal guidance.

**Environmental Precautions:** Contain spill to prevent migration to drains, sewers or open water sources. Discharge into the environment must be avoided.

Section 7 – Handling and Storage

**Specific Use:** For *In Vitro Diagnostic* use. Not for use by the general public.

**Precautions for Safe Handling**
As with all chemical and biological substances, avoid getting the components within this kit ON YOU or IN YOU. Wash exposed areas thoroughly after using this kit. Do not eat or drink while using this kit. This kit should be handled only by qualified clinical or laboratory employees trained on the use of this kit and who are familiar with the potential hazards. Universal Precautions should be followed when handling and working with this kit. Keep out of reach of the general public.

**Conditions for Safe Storage:** To maintain efficacy, store according to the kit specific Package Insert instructions.

**Incompatibilities**
To maintain efficacy, store according to the kit specific Package Insert instructions.

Section 8 – Exposure Controls and Personal Protection

**Exposure Limits:** No data available for the specific components within this kit.

**Exposure Controls:**

<table>
<thead>
<tr>
<th>Engineering Measures</th>
<th>Use with adequate ventilation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Protective Equipment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory Protection:</strong></td>
<td>None needed under normal conditions of use.</td>
</tr>
<tr>
<td><strong>Hand Protection:</strong></td>
<td>Handle with appropriately rated chemical resistant gloves. Gloves should be inspected prior to use. Use proper glove technique to remove gloves to avoid contact with skin. Wash hands after handling the components within this kit.</td>
</tr>
<tr>
<td><strong>Eye Protection:</strong></td>
<td>Wear safety glasses with side shields or goggles to prevent eye contact.</td>
</tr>
<tr>
<td><strong>Skin and Body Protection:</strong></td>
<td>Use body protection appropriate for the task. A laboratory coat is recommended.</td>
</tr>
<tr>
<td><strong>Hygiene Measures:</strong></td>
<td>Wash hands before and after use and at the end of the workday.</td>
</tr>
</tbody>
</table>

**Environmental Exposure Controls**
No special environmental controls are required.

Section 9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>40X PBS Concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate (Ether = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.0-7.6</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear liquid, mild odor</td>
</tr>
</tbody>
</table>
### Section 10 – Stability and Reactivity

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>40X PBS Concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Hazard Reaction Potential</td>
<td>No data available</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>No data available</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>Metals, acids, dimethyl sulfate, halogenated hydrocarbons</td>
</tr>
<tr>
<td>Hazardous Decomposition Products</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Section 11 – Toxicological Information

#### Acute Toxicity

**Component Analysis – LD50 / LC50 / Irritation** (No data available for specific kit components)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>RTECS #</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Azide</td>
<td>26628-22-8</td>
<td>VY8050000</td>
<td>Oral LD$<em>{50}$: Rabbit 10 mg/kg, Inhalation LC$</em>{50}$: Rat 37 mg/m$^3$, Dermal LD$_{50}$: Rabbit 20 mg/kg</td>
</tr>
</tbody>
</table>

**Potential Health Effects:**

- **40X PBS Concentrate:** Toxic, Irritant
  - Skin Corrosion/ Irritation: No data available
  - Serious Eye Damage / Irritation: No data available
  - Respiratory or Skin Sensitization: No data available
  - Generative Cell Mutagenicity: No data available
  - Ingestion: May be harmful if swallowed.

**Carcinogenicity**

- HSV-1 DFA Reagent: Evans Blue IARC Group 3: Not classifiable as to its carcinogenicity to humans.
- HSV-2 DFA Reagent: Evans Blue IARC Group 3: Not classifiable as to its carcinogenicity to humans.

**Reproductive Toxicity**

- No data available

**Teratogenicity**

- No data available

**Specified Target Organ General Toxicity (GHS)**

- Single Exposure (GHS): No data available
- Repeated Exposure (GHS): No data available

**Aspiration Respiratory Organs Hazard**

- None anticipated under product use conditions.

**Synergistic Effects**

- No data available

**Additional Information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated for the components within this kit.

- **40X PBS Concentrate:** Liver – irregularities – Based on Human Evidence (Sodium Azide)
Section 12 – Ecological Information

Ecotoxicity
No data available

Mobility in Soil
No data available

Persistence / Degradability
No data available

Bioaccumulation
No data available

PBT and vPvB Assessment
No data available

Other Adverse Effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Avoid release to the environment.

Section 13 – Disposal Considerations

Waste Disposal Instructions
Utilize appropriate personal protective equipment and spill control when handling wastes generated from using this kit. Do not discharge any of the solutions, reagents, controls, cultures or media into drains, water courses or onto the ground.

Disposal of Product and Contaminated Packaging
Dispose of waste materials, unused components and contaminated packaging in compliance with country, federal, state and local regulations. If unsure of the applicable regulatory requirements, contact a licensed professional waste disposal service to dispose of this material.

Section 14 – Transportation Information

U.S. Department of Transportation (DOT)
Not regulated for transport

International Air Transportation (IATA)
Not regulated for transport

International Maritime Dangerous Goods (IMDG)
Not regulated for transport

Classification Notes:
- LD<sub>50</sub> Oral (Rat) is >3000 mg/kg
- LC<sub>50</sub> Inhalation (Rat) is > 5 mg/L
- Dermal Toxicity

According to 49 CFR 173.137, OECD 404 and UN/SCEGHS/25/INF.19 this article is not corrosive to rabbit skin.

For LD<sub>50</sub> and LC<sub>50</sub> classification refer to 49 CFR 173.132 (2010).

Section 15 – Regulatory Information

Regulatory Information

U.S. Federal Regulations

OSHA Hazards
40X PBS Concentrate: Toxic, Irritant

SARA 302
The following chemicals are subject to reporting levels established by SARA Title III, Section 302:
- Sodium Azide
  - CAS #: 26628-22-8
  - Revision Date: 2007-07-01

SARA 313
The following chemicals are subject to reporting levels established by SARA Title III, Section 313:
- Sodium Azide
  - CAS #: 26628-22-8
  - Revision Date: 2007-07-01

SARA 311/312
- Sodium Azide
  - CAS #: 26628-22-8
  - Acute Health Hazard, Chronic Health Hazard
State Regulations

The following chemical(s) appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Azide</td>
<td>26628-22-8</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**California Prop 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Canadian – WHMIS IDL**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**Additional Regulatory Information**

**Safety, Health and Environmental regulations/legislation specific for the mixture:**

Not completed for this components contained within this kit.

**Chemical Safety Assessment:**

Not completed for this components contained within this kit.

**HMIS Kit Classification:**

<table>
<thead>
<tr>
<th>Health Hazard:</th>
<th>Fire Hazard (red):</th>
<th>Reactivity Hazard (yellow):</th>
<th>Special Hazards (white):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**NFPA Kit Classification:**

<table>
<thead>
<tr>
<th>Health Hazard (blue):</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

*Use additional care when handling this kit.*

Section 16 – Other Information

**Text of H-code(s) mentioned in Section 3:**

- Acute Tox.
- Aquatic Chronic
- Aquatic Acute
- H300 + H310
- H373
- H410
- STOT RE

**Prepared By:** Quidel Corporation

12544 High Bluff Drive, Suite 200, San Diego, CA 92130

**Supersedes:** April 27, 2015

**Revisions:** Update Section 14, Transportation information and general formatting.

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