Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY IDENTIFICATION

bioMérieux, Inc.
595 Anglum Road
Hazelwood, MO  63042
For Information call: 1-800-638-4835
1-314-854-0344
Or Contact Your Local Poison Control Center

EMERGENCY CONTACT

Product Number: 30200, 30217, 30400, 30401, 30404, 30406, 30407, 30409, 30410, 30411, 30417, 30419, 30431, 30604
Product Name: VIDAS Rubella IgG(RBG), Varicella-Zoster IgG(VZG), TSH(TSH), FT4(FT4), T4(T4), HCG(HCG), LH(LH), FSH(FSH), Progesterone(PRG), Prolactin(PRL), Ferritin(FER), Cortisol(CORT), Total(IgE), Estradiol II(E2 II), Theophylline(THEO)

Product Description: These kits contain plastic reagent strips with 10 wells each containing reagents or washes, plastic SPRs, and liquid or lyophilized controls and reagents.

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percentage</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Animal Serum (Various Kit Components)</td>
<td></td>
<td>None Established</td>
</tr>
<tr>
<td>111-42-2</td>
<td>Diethanolamine (Reagent Strip)</td>
<td>7-14%</td>
<td>None Established-PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.46 ppm TLV-TWA skin</td>
</tr>
<tr>
<td>26628-22-8</td>
<td>Sodium Azide (All kit components)</td>
<td>&lt;0.1%</td>
<td>None Established-PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.29 mg/m3 TLV-C</td>
</tr>
<tr>
<td>N/A</td>
<td>Human Serum (Standards, Controls, Diluents)</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

PEL=OSHA Permissible Exposure Limit.  TLV=ACGIH Threshold Limit Value.  TWA=time weighted average.

Section 3: HAZARDS IDENTIFICATION

U.S. PRECAUTIONARY LABELING

CAUTION
Contact with reagents may cause irritation and other harmful effects. Do not get in eyes, on skin or clothing. Keep containers closed.
Observe biosafety procedures when handling kit and patient specimens.

INTERNATIONAL LABELING
Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure if swallowed. Avoid contact with eyes. In case of contact with eyes, rinse with plenty of water and seek medical advice. Wear suitable protective clothing and eye/face protection.

EU Classification: Harmful
R and S Phrases: R41, R48/22, S25, S26, S36/39

HEALTH HAZARDS:
Inhalation: Inhalation of mists may cause respiratory irritation and possible systemic effects similar to ingestion.
Skin Contact: Contact may cause mild irritation. Sodium azide is absorbed through the skin with symptoms similar to ingestion.
Eye Contact: Contact may cause moderate to severe irritation.
Ingestion: May cause gastrointestinal irritation and other adverse effects. Sodium azide is highly toxic by ingestion and may cause nausea, vomiting, shortness of breath, low blood pressure and collapse.
Chronic Health Hazards: Prolonged overexposure to diethanolamine may cause liver and kidney damage.
Carcinogen Status: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure: None currently known.

N/D = Not Determined
N/A = Not Applicable
MSDS Number: 410179-5
Section 4: FIRST AID MEASURES

**Inhalation:** Immediately remove the victim to fresh air. If breathing has stopped administer artificial respiration. Get immediate medical attention.

**Skin Contact:** Immediately remove contaminated clothing. Wash the contact area thoroughly with soap and water. Get medical attention if irritation develops.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open to assure that the entire surface is flushed. Get immediate medical attention.

**Ingestion:** Immediately call poison control and follow their instructions. Do not give anything by mouth. Get immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

**Flash Point (Method Used):** None

**Autoignition Temp:** None

**Flammable Limits:**
- **LEL:** N/A
- **UEL:** N/A

**Extinguishing Media:** Use any media appropriate for the surrounding fire.

**Special Fire Fighting Procedures:** Firefighters should wear self-contained breathing apparatus and full protective clothing.

**Unusual Fire and Explosion Hazards:** None.

**Hazardous Combustion Products:** None.

Section 6: ACCIDENTAL RELEASE MEASURES

Wear protective gloves and apron. Treat spill area with liquid detergent and a 10% bleach solution to inactivate infectious agents. Wipe area thoroughly with a damp paper towel and dispose as biohazardous waste.

Section 7: HANDLING AND STORAGE

Follow the directions on the package insert. Follow good laboratory practices of avoiding contact (breathing, touching, smoking ...) with a laboratory reagent. Avoid contact with the skin and eyes. Observe routine biosafety precautions in handling reagents and patient specimens.

Follow storage instructions on the product label.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ventilation:** General laboratory ventilation should be adequate.

**Respiratory Protection:** None should be needed.

**Gloves:** Powderless disposable latex gloves recommended.

**Eye Protection:** Standard laboratory safety glasses.

**Other Protective Equipment/Clothing:** None known.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

N/D = Not Determined  
N/A = Not Applicable

MSDS Number: 410179-5
Material Safety Data Sheet

Product Name: VIDAS Rubella IgG(RBG), Varicella-Zoster IgG(VZG), TSH(TSH), FT4(FT4), T4(T4), HCG(HCG), LH(LH), FSH(FSH), Progesterone(PRG), Prolactin(PRL), Ferritin(FER), Cortisol(CORT), Total(IgE), Estradiol II(E2 II), Theophylline(THEO)

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Appearance and Odor: Controls and Reagents - aqueous solutions. 30409 - Controls and Calibrators - lyophilized powders.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>6-9.8</td>
</tr>
<tr>
<td>Boiling Point (F)</td>
<td>N/D</td>
</tr>
<tr>
<td>Melting Point (F)</td>
<td>N/D</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>N/D</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>N/D</td>
</tr>
<tr>
<td>Coefficient of Oil/Water</td>
<td>N/D</td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Avoid heat.

Incompatibility: Metals (aluminum, mercury, copper, lead, zinc), strong acids.

Hazardous Decomposition Products: Sodium azide can react with metals to form explosive metallic azides.

Hazardous Polymerization: Will not occur.

Section 11: TOXICOLOGICAL INFORMATION

Sodium azide: Oral rat LD50: 27 mg/kg, Skin rabbit LD50: 20 mg/kg.
Diethanolamine: Oral rat LD50: 710 mg/kg; Skin rabbit LD50: 12.2 g/kg.

Section 12: ECOLOGICAL INFORMATION

Sodium azide: LC50 Daphnia Pulex: 4.2 mg/L/96 hr @ 15 C. Rainbow Trout: 0.8-1.6 mg/L/96 hr @ 13C, Wt. 1.4G.

These products may contain a non-ionic surfactant Tween 20. 30409 and 30419 also contain a preservative. 30419 contains <0.2% meta-cresol.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of product in accordance with all local, state/provincial and federal regulations for biohazardous products.

Container Disposal: Empty containers should be collected for proper disposal as biohazardous products.

Section 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION

Proper Shipping Name: Not regulated
Technical Name:
UN Number: N/A
Hazard Class/Packing Group: N/A
Labels Required: None
DOT Packaging Requirements: N/A
Exceptions: N/A

IATA/ICAO AIR TRANSPORTATION

Proper Shipping Name: Not regulated
Technical Name:
UN Number: N/A
Hazard Class/Packing Group: N/A

N/D = Not Determined

N/A = Not Applicable

MSDS Number: 410179-5
Labels Required: None
IATA Packaging Requirements: N/A
Comment:

Section 15: REGULATORY INFORMATION

SARA 311/312: Hazard Categories for SARA 311/312 Reporting: Acute health, chronic health
SARA 313: This Product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR372):
- Diethanolamine 6-14%
  (Reagent Strip Wells)
CERCLA Section 103 Reportable Quantity: Product: 710 lbs (Diethanolamine-100 lbs)
California Proposition 65:
This product contains the following substances known to the State of California to cause cancer and/or reproductive harm:
- 30409 contains Progesterone, a carcinogen.
- 30431 contains Estradiol 17B, a carcinogen.
Progesterone and Estradiol are anabolic steroids which are reproductive toxins.
Canadian WHMIS Classification: Class D-2-B

Section 16: OTHER INFORMATION

NFPA Hazard Rating: Health: 1  Fire: 0  Reactivity: 0
Revision Summary: Changed the amount of sodium azide (Section 2). Added dermal tox data (Section 2). Revised EU Labeling and R&S Phrases (Section 3).

This product contains source materials of both human and animal origin. The human origin materials were tested and found to be negative for the presence of hepatitis B surface antigen and antibody to hepatitis C and HIV-I and HIV-II. Since no testing method can completely assure that infectious agents such as hepatitis B or C or HIV-I or HIV-II are absent, handle all kit components as potentially infectious materials in accordance with all applicable standards and regulations. In the United States refer to OSHA 1910.1030.

This product contains sodium azide which could react with lead or copper plumbing to form explosive metal azides. If liquid containing sodium azide is disposed of in the plumbing system, flush drains with large volumes of water to avoid buildup.

CREATION DATE: 8/1/1999  REVISION DATE: 1/31/2003

The above information is believed to be correct as of the date of this sheet but does not purport to be all inclusive and shall be used only as a guide. Since the use of this information and the conditions of use of the product are not within the control of bioMérieux S.A. nor bioMérieux, Inc., it is the users obligation to assure safe use of this product.