1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: QBC STAR Test Kit
Catalog Number: 429625

Product use Description:
For hematology determinations with capillary blood using QBC series Analyzer. For In Vitro Diagnostics use

Manufacturer: Drucker Diagnostics
168 Bradford Drive
Port Matilda, PA, 16870 USA
Telephone (814) 692-7661

In case of an emergency, spill, fire, exposure, or accident contact:
Drucker Diagnostics Technical Support
866-265-1486

2. HAZARDS IDENTIFICATION

Classifications:
Specific Target Organ Toxicity (Repeated Exposure) – Category 2
Skin Irritation – Category 3
Eye Irritation – Category 2B
Germ Cell Mutagenicity- Category 1B

Health Statements:
H302/H312/H332  Harmful by inhalation, in contact with skin and if swallowed.
H313  May be harmful in contact with skin
H315/H320/H335  Irritating to eyes, respiratory system and skin
H333  May be harmful if inhaled
H318  May cause serious eye damage
H373  May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:
P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 Read label before use
P262 Avoid contact with skin and eyes
P305+351+338 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
P28 Wear protective gloves/protective clothing/eye protection/face protection
P314 In case of accident or if you feel unwell seek medical attention immediately, (show the label where possible)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Hazardous Ingredients (specific)</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Oxalate</td>
<td>583-52-8</td>
<td>33%</td>
</tr>
<tr>
<td>Acridine Orange</td>
<td>10127-02-3</td>
<td>0.81%</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation IF INHALED, supply fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.
Skin Contact IF ON SKIN, immediately wash with soap and water and rinse thoroughly.
Eye Contact IF IN EYES, rinse the open eye with water for 15 minutes. Seek medical attention if irritation develops.
Ingestion IF SWALLOWED, immediately seek medical attention.

Notes to Physician: Treat Symptomatically

5. FIRE-FIGHTING MEASURES

Flammability Summary
Product is not known to be flammable, combustible, pyrophoric, or explosive.

Suitable Extinguishing Agents
CO₂, ABC Multipurpose Dry Chemical or Water Spray
Fight larger fires with water spray or alcohol resistant foam.

Unsuitable Extinguishing Agents
Not Applicable

Protective Equipment
Not Applicable
6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations
Use the personal protection equipment recommended in Section 8.

Measures for Environmental Protection
Wipe up with a damp sponge or mop.

Measures for Cleaning/Collecting
Use personal protection equipment recommended in Section 8 and be cautious if there is broken glass present. Use internal policy for cleaning-up and disposing of chemical contaminated sharps.

Refer to Section 13 for specific disposal information.

7. HANDLING AND STORAGE

Handling
Information for safe handling:
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosion and fires:
No special measures required.

Storage
Requirements to be met by storerooms and receptacles:
No special requirements

Information about storage in one common storage facility:
Store away from oxidizing agents

Further information about storage conditions:
None.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #*</th>
<th>Type*:</th>
<th>Value*:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Oxalate</td>
<td>583-52-8</td>
<td>LD₅₀ Oral</td>
<td>10-30 g (Adult)</td>
</tr>
<tr>
<td>Acridine Orange</td>
<td>10127-02-3</td>
<td>PEL</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*This Information was taken from the MSDS’ of the individual chemicals

Personal Protective Equipment

Respiratory Protection Not necessary
Hand Protection  Chemical resistant gloves (i.e. nitrile)
Eye Protection  Safety glasses or face shield
Body Protection  Protective work clothing (i.e. lab coat)

When the product is used as directed with human blood:

Use appropriate personal protection equipment as instructed in an internal blood borne pathogen exposure control plan.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>Orange/White</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Product is not flammable</td>
</tr>
<tr>
<td>Danger of Explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Density</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Solubility</td>
<td></td>
</tr>
<tr>
<td>In Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solvent Contents</td>
<td>0.0%</td>
</tr>
<tr>
<td>Solids Contents</td>
<td>100%</td>
</tr>
</tbody>
</table>

**10. STABILITY AND REACTIVITY**

**Thermal Decomposition**
No decomposition if used according to specifications

**Conditions to Avoid**
None if used according to specifications

**Dangerous Reactions**
No dangerous reactions known

**Dangerous Products of Decomposition**
Carbon Monoxide (CO) and Carbon Dioxide (CO₂)

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity**
No acute toxicity effects known

**Skin irritation/corrosion**
May cause skin irritation or burns

**Eye damage/irritation**
May cause eye irritation or burns
Respiratory or skin sensitization: No sensitizing effects known

Reproductive cell mutagenicity: Contains mutagen*

Subchronic Data – Acridine Orange*
  Bacteria Mutation: 10 mmol/L
  DNA Damage Rodent-mouse ascites tumor: 20 µmol/L
  DNA Adduct –fish, salmon sperm: 40 nmol/L

*This information was taken from the MSDS of acridine orange

Carcinogenicity: No carcinogenic effects known

Reproductive Toxicity: No reproductive toxicity effects known

Specific Target Organ Toxicity

  Single Exposure: No toxicity effects known
  Repeated Exposure: Target Organs: Blood, liver, kidney, respiratory system and skin

Aspiration Hazard: No aspiration hazards known

12. ECOLOGICAL INFORMATION

The ecological effects have not been thoroughly investigated, but currently none have been identified.

Water Hazard Class 1 (Self-Assessment): slightly hazardous for water

13. DISPOSAL CONSIDERATIONS

Disposal of Product
  This product is not considered a RCRA hazardous waste
  Dispose of materials in accordance with federal, state and local requirements.
  Product used with human blood as directed should be disposed of according to internal medical waste/sharps disposal requirements.

Disposal of Uncleaned Packaging
  Dispose of materials in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

*It is the determination of Drucker Diagnostics that the product does not meet the basic description of a Hazardous Material or Dangerous Good under the DOT, IATA or IMDG transportation regulations.*

*This product contains minimal amounts of toxic solids. The device is formed to a specific shape and the toxic materials are sprayed onto the glass. Due to the design during manufacturing and that the device must be used in...*
whole during end use, the device does not release or otherwise result in exposure to hazardous chemical under normal conditions of use and transport.

DOT Regulations
Hazard Class Not Applicable

Land Transport ARD/RID
Hazard Class Not Applicable

Maritime transport IMDG
Hazard Class Not Applicable
Marine Pollutant No

Air Transport ICAO-TI and IATA-DGR
Hazard Class Not Applicable

15. REGULATORY INFORMATION

EPCRA Section 313 ( Extremely Hazardous Substances)
- 26628-2-28 Sodium Azide
- 67-63-0 Isopropanol

TSCA ( Toxic Substances Control Act)
- 583528 Potassium Oxalate
- 67630 Isopropanol

California Proposition 65 – Section A – Chemicals Known to Cause Cancer
None of the ingredients listed

California Proposition 65 – Section B – Chemicals Known to Cause Reproductive Toxicity
None of the ingredients listed

IARC ( International Agency for Research on Cancer)
- 67630 Isopropanol ( Group 3)

NTP ( National Toxicology Program)
None of the ingredients listed

16. OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, neither Drucker Diagnostics, Inc. or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Issue By: Drucker Diagnostics Quality Department
Prepared Date: 5/23/2014

Contact: Technical Service Representative