SAFETY DATA SHEET

NovoCyte Flow Cytometer Starter Kit, Part Number 8100020

Section 1. Identification

Product identifier: NovoCyte Flow Cytometer Starter Kit, Part Number 8100020
Part no. (chemical kit): 8100020
Part no.: NovoRinse solution 872B603C
NovoFlow sheath fluid 891B601
Material uses: For research use only. Not for use in diagnostic procedures (RUO).

NovoRinse solution 1x 500ml
NovoFlow sheath fluid 1x 10L

Supplier/Manufacturer: Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

Emergency telephone number (with hours of operation): CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

Classification of the substance or mixture
Not classified.

GHS label elements

Signal word: NovoRinse solution No signal word.
NovoFlow sheath fluid No signal word.

Hazard statements: NovoRinse solution No known significant effects or critical hazards.
NovoFlow sheath fluid No known significant effects or critical hazards.

Precautionary statements

Prevention: NovoRinse solution Not applicable.
NovoFlow sheath fluid Not applicable.

Response: NovoRinse solution Not applicable.
NovoFlow sheath fluid Not applicable.

Storage: NovoRinse solution Not applicable.
NovoFlow sheath fluid Not applicable.

Disposal: NovoRinse solution Not applicable.
NovoFlow sheath fluid Not applicable.

Supplemental label elements: None known.

Other hazards which do not result in classification: None known.
Section 3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Eye contact</th>
<th>Skin contact</th>
<th>Inhalation</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NovoRinse solution</td>
<td>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>NovoFlow sheath fluid</td>
<td>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

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**Section 4. First-aid measures**

**Over-exposure signs/symptoms**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>NovoRinse solution</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>NovoRinse solution</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>NovoRinse solution</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>NovoRinse solution</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Indication of immediate medical attention and special treatment needed, if necessary**

<table>
<thead>
<tr>
<th>Notes to physician</th>
<th>NovoRinse solution</th>
<th>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
<tr>
<td>Specific treatments</td>
<td>NovoRinse solution</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific treatment.</td>
</tr>
<tr>
<td>Protection of first-aiders</td>
<td>NovoRinse solution</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

See toxicological information (Section 11)

**Section 5. Fire-fighting measures**

**Extinguishing media**

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>NovoRinse solution</th>
<th>Use an extinguishing agent suitable for the surrounding fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>Use an extinguishing agent suitable for the surrounding fire.</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>NovoRinse solution</td>
<td>None known.</td>
</tr>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>None known.</td>
</tr>
</tbody>
</table>

**Specific hazards arising from the chemical**

<table>
<thead>
<tr>
<th>Specific hazards arising from the chemical</th>
<th>NovoRinse solution</th>
<th>In a fire or if heated, a pressure increase will occur and the container may burst.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>In a fire or if heated, a pressure increase will occur and the container may burst.</td>
</tr>
</tbody>
</table>

**Hazardous thermal decomposition products**

<table>
<thead>
<tr>
<th>Hazardous thermal decomposition products</th>
<th>NovoRinse solution</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Special protective actions for fire-fighters**

<table>
<thead>
<tr>
<th>Special protective actions for fire-fighters</th>
<th>NovoRinse solution</th>
<th>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NovoFlow sheath fluid</td>
<td>Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>
Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters**
- **NovoRinse solution**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **NovoFlow sheath fluid**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel
- **NovoRinse solution**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders
- **NovoRinse solution**: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions
- **NovoRinse solution**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Methods for cleaning up
- **NovoRinse solution**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- **NovoFlow sheath fluid**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Section 7. Handling and storage

Precautions for safe handling

Protective measures:
- NovoRinse solution: Put on appropriate personal protective equipment (see Section 8).
- NovoFlow sheath fluid: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene:
- NovoRinse solution: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- NovoFlow sheath fluid: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities:
- NovoRinse solution: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
- NovoFlow sheath fluid: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 8. Exposure controls/personal protection

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance


Odor: NovoRinse solution Not available. NovoFlow sheath fluid Not available.


pH: NovoRinse solution Not available. NovoFlow sheath fluid 7

Melting point: NovoRinse solution 0°C (32°F). NovoFlow sheath fluid 0°C (32°F).

Boiling point: NovoRinse solution 100°C (212°F). NovoFlow sheath fluid 100°C (212°F).

Flash point: NovoRinse solution Not available. NovoFlow sheath fluid Not available.

Evaporation rate: NovoRinse solution Not available. NovoFlow sheath fluid Not available.

Flammability (solid, gas): NovoRinse solution Not applicable. NovoFlow sheath fluid Not applicable.

Lower and upper explosive (flammable) limits: NovoRinse solution Not available. NovoFlow sheath fluid Not available.

Vapor pressure: NovoRinse solution Not available. NovoFlow sheath fluid Not available.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>NovoRinse solution</th>
<th>NovoFlow sheath fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Category</th>
<th>NovoRinse solution</th>
<th>NovoFlow sheath fluid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactivity</strong></td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td><strong>Chemical stability</strong></td>
<td>The product is stable.</td>
<td>The product is stable.</td>
</tr>
<tr>
<td><strong>Possibility of hazardous reactions</strong></td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td><strong>Conditions to avoid</strong></td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Incompatible materials</strong></td>
<td>May react or be incompatible with oxidizing materials.</td>
<td>May react or be incompatible with oxidizing materials.</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products</strong></td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**
Not available.

**Irritation/Corrosion**
Not available.

**Sensitization**

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Section 11. Toxicological information

Not available.

**Mutagenicity**
- Conclusion/Summary: Not available.

**Carcinogenicity**
- Conclusion/Summary: Not available.

**Reproductive toxicity**
- Conclusion/Summary: Not available.

**Teratogenicity**
- Conclusion/Summary: Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

Information on the likely routes of exposure

- **Inhalation**:
  - NovoRinse solution: No known significant effects or critical hazards.
  - NovoFlow sheath fluid: No known significant effects or critical hazards.

- **Skin contact**:
  - NovoRinse solution: No known significant effects or critical hazards.
  - NovoFlow sheath fluid: No known significant effects or critical hazards.

- **Ingestion**:
  - NovoRinse solution: No known significant effects or critical hazards.
  - NovoFlow sheath fluid: No known significant effects or critical hazards.

Potential acute health effects

- **Eye contact**:
  - NovoRinse solution: No known significant effects or critical hazards.
  - NovoFlow sheath fluid: No known significant effects or critical hazards.

- **Inhalation**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

- **Skin contact**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

- **Ingestion**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

Symptoms related to the physical, chemical and toxicological characteristics

- **Eye contact**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

- **Inhalation**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

- **Skin contact**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

- **Ingestion**:
  - NovoRinse solution: No specific data.
  - NovoFlow sheath fluid: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

- **Short term exposure**
  - Potential immediate effects: Not available.
  - Potential delayed effects: Not available.

- **Long term exposure**
  - Potential immediate effects: Not available.
Section 11. Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

**General**
- No known significant effects or critical hazards.

**Carcinogenicity**
- NovoRinse solution: No known significant effects or critical hazards.
- NovoFlow sheath fluid: No known significant effects or critical hazards.

**Mutagenicity**
- NovoRinse solution: No known significant effects or critical hazards.
- NovoFlow sheath fluid: No known significant effects or critical hazards.

**Teratogenicity**
- NovoRinse solution: No known significant effects or critical hazards.
- NovoFlow sheath fluid: No known significant effects or critical hazards.

**Developmental effects**
- NovoRinse solution: No known significant effects or critical hazards.
- NovoFlow sheath fluid: No known significant effects or critical hazards.

**Fertility effects**
- NovoRinse solution: No known significant effects or critical hazards.
- NovoFlow sheath fluid: No known significant effects or critical hazards.

Numerical measures of toxicity

**Acute toxicity estimates**
N/A

Section 12. Ecological information

**Toxicity**
Not available.

**Persistence and degradability**
Not available.

**Bioaccumulative potential**
Not available.

**Mobility in soil**
- Soil/water partition coefficient (K_{oc}) : Not available.

**Other adverse effects**
- No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**
- The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists
- Canadian NPRI : None of the components are listed.
- CEPA Toxic substances : None of the components are listed.

International regulations
- UNECE Aarhus Protocol on POPs and Heavy Metals : Not listed.

Inventory list
- Australia : All components are listed or exempted.
- Canada : All components are listed or exempted.
- China : All components are listed or exempted.
- Europe : All components are listed or exempted.
- Japan : Japan inventory (ENCS): All components are listed or exempted.
- Japan inventory (ISHL): All components are listed or exempted.
- New Zealand : All components are listed or exempted.
- Philippines : All components are listed or exempted.
- Republic of Korea : All components are listed or exempted.
- Taiwan : All components are listed or exempted.
- Thailand : Not determined.
- Turkey : Not determined.
- United States : All components are active or exempted.
- Viet Nam : All components are listed or exempted.
Section 16. Other information

History

Date of issue/Date of revision : 08/31/2020
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Version : 2.1

Key to abbreviations : 
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available
UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
<td></td>
</tr>
</tbody>
</table>

References : Not available.

Notice to reader

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