Section 1. Identification

Product identifier : Seahorse XF Calibrant Solution

Part no. : 00840-000, 103059-000, 102416-100, 102601-100, 102905-100, 102340-100, 102342-100, 100850-001, 100876-100, 101174-100, 103022-100, 103518-100, 103721-100, 103723-100, 103724-100, 103729-100, 103775-100, 103777-100, 103792-100, 103793-100, 103798-100

Relevant identified uses of the substance or mixture and uses advised against

Material uses : For research use only. Not for use in diagnostic procedures (RUO).

500 mL  Seahorse XF Calibrant Solution, 500 mL  100840-000
100 mL  Seahorse XF Calibrant Solution, 100 mL  103059-000
500 mL  Seahorse XFe96 FluxPak  102416-100
500 mL  Seahorse XFe96 FluxPak mini  102601-100
500 mL  Seahorse XFe96 Spheroid FluxPak  102905-100
500 mL  Seahorse XFe24 FluxPak  102340-100
500 mL  Seahorse XFe24 FluxPak mini  102342-100
500 mL  Seahorse XFe24 FluxPak  100850-001
500 mL  Seahorse XFe24 FluxPak mini  100876-100
500 mL  Seahorse XFe24 Islet FluxPak  101174-100
100 mL  Seahorse XFp FluxPak  103022-100
500 mL  Seahorse XFe24 Islet FluxPak  103518-100
100 mL  Seahorse XFp FluxPak (PDL miniplates)  103721-100
100 mL  Seahorse XF HS Mini FluxPak  103723-100
100 mL  Seahorse XF HS Mini FluxPak (PDL Plates)  103724-100
500 mL  Seahorse XFe96 FluxPak mini (PDL Plates)  103729-100
500 mL  Seahorse XF Pro M FluxPak  103775-100
500 mL  Seahorse XF Pro M FluxPak Mini  103777-100
500 mL  Seahorse XFe96/XF Pro FluxPak  103792-100
500 mL  Seahorse XFe96/XF Pro FluxPak Mini  103793-100
500 mL  Seahorse XFe96/XF Pro PDL FluxPak Mini  103798-100

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture
Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.
Section 2. Hazard(s) identification

Disposal : Not applicable.

Supplemental label elements

Additional warning phrases : Not applicable.

Other hazards which do not result in classification : None known.

Section 3. Composition and ingredient information

Substance/mixture : Mixture

CAS number/other identifiers

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

Eye contact : 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.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Date of issue/Date revision : 28/10/2021 Date of previous issue : 28/04/2020 Version : 4
Section 5. Firefighting measures

Extinguishing media
- Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical
- Hazardous thermal decomposition products: In a fire or if heated, a pressure increase will occur and the container may burst.
- No specific data.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters
- 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: 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 spilt material. Put on appropriate personal protective equipment.
- For emergency responders: If specialised 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
- Avoid dispersal of spilt 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 material for containment and cleaning up
- Methods for cleaning up: 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: Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene: 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: 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Date of issue/Date of revision: 28/10/2021
Date of previous issue: 28/04/2020
Version: 4
Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Environmental exposure controls

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

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.

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 and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Colour : Not available.

Odour : Not available.

Odour threshold : Not available.

pH : 7.3 to 7.5

Melting point/freezing point : 0°C (32°F)

Boiling point, initial boiling point, and boiling range : 100°C (212°F)

Flash point : Not available.

Evaporation rate : Not available.

Flammability : Not applicable.
Section 9. Physical and chemical properties and safety characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Miscible with water</td>
<td>Yes.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient:</td>
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</tr>
<tr>
<td>Median particle size</td>
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</tr>
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</table>

### Ingredient name

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Vapour Pressure at 20˚C</th>
<th>Vapour pressure at 50˚C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td>Water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

- **Reactivity**: No specific test data related to reactivity available for this product or its ingredients.
- **Chemical stability**: The product is stable.
- **Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid**: No specific data.
- **Incompatible materials**: May react or be incompatible with oxidising materials.
- **Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity**: Not available.
  - **Irritation/Corrosion**: Not available.
  - **Sensitisation**: Not available.
  - **Mutagenicity**: Not available.
  - **Carcinogenicity**: Not available.
  - **Reproductive toxicity**: Not available.
  - **Conclusion/Summary**: Not available.
### Section 11. Toxicological information

#### 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.

<table>
<thead>
<tr>
<th>Information on likely routes of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
</tr>
<tr>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potential acute health effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
</tr>
<tr>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
</tr>
<tr>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
</tr>
<tr>
<td>No specific data.</td>
</tr>
</tbody>
</table>

#### Symptoms related to the physical, chemical and toxicological characteristics

| **Eye contact** | No specific data. |
| **Inhalation**  | No specific data. |
| **Skin contact**| No specific data. |
| **Ingestion**   | No specific data. |

#### Delayed and immediate effects as well as 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. |
| **Potential delayed effects**   | Not available. |

**Potential chronic health effects**

| **General**                        | No known significant effects or critical hazards. |
| **Carcinogenicity**                | No known significant effects or critical hazards. |
| **Mutagenicity**                   | No known significant effects or critical hazards. |
| **Reproductive toxicity**          | 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 (Koc): 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 minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

**ADG / IMDG / IATA**
Not regulated as Dangerous Goods according to the ADG Code.

**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

**Standard for the Uniform Scheduling of Medicines and Poisons**
5

**Model Work Health and Safety Regulations - Scheduled Substances**
No listed substance

**International regulations**
- Chemical Weapon Convention List Schedules I, II & III Chemicals
  Not listed.
- Montreal Protocol
  Not listed.
- Stockholm Convention on Persistent Organic Pollutants
  Not listed.
Section 15. Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNEP Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Canada</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>China</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Europe</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Japan</td>
<td>Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Philippines</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>Turkey</td>
<td>All components listed or exempted.</td>
</tr>
<tr>
<td>United States</td>
<td>All components active or exempted.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>All components listed or exempted.</td>
</tr>
</tbody>
</table>

Section 16. Any other relevant information

History

Date of issue/Date of revision: 28/10/2021
Date of previous issue: 28/04/2020
Version: 4

Key to abbreviations:
ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
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
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification

Not classified.

References: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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