SAFETY DATA SHEET

Refill, Big H2O Trap, 1500 cc, Part Number BMSR-1

Section 1. Identification

1.1 Product identifier
Product name : Refill, Big H2O Trap, 1500 cc, Part Number BMSR-1
Part no. : BMSR-1
Validation date : 9/29/2021

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use 1500 ml Bottle

1.3 Details of the supplier of the safety data sheet
Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number
In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture
H350 : CARCINOGENICITY - Category 1A
H372 : SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 18%

2.2 GHS label elements
Hazard pictograms :

Signal word : Danger
Hazard statements : H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure. (lungs)

Precautionary statements
Prevention : P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P260 - Do not breathe dust or mist.
P270 - Do not eat, drink or smoke when using this product.

Response : P308 + P313 - IF exposed or concerned: Get medical advice or attention.

Storage : Not applicable.
Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards

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Section 2. Hazards identification

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica, respirable powder</td>
<td>≤10</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>cristobalite</td>
<td>≤10</td>
<td>14464-46-1</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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

Section 4. First aid measures

4.1 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. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: irritation redness

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Section 4. First aid measures

**Inhalation**: Adverse symptoms may include the following: respiratory tract irritation, coughing.

**Skin contact**: No specific data.

**Ingestion**: No specific data.

### Notes to physician

- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### Specific treatments

- **Inhalation**: No specific data.
- **Ingestion**: No specific data.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

### 5.1 Extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

- **Specific hazards arising from the chemical**: No specific fire or explosion hazard.
- **Hazardous thermal decomposition products**: Decomposition products may include the following materials: metal oxide/oxides.

### 5.3 Advice for firefighters

- **Special protective actions for fire-fighters**: 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.
- **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

### 6.1 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 spilled material. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- **For emergency responders**: 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".

### 6.2 Environmental precautions

- 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).

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Section 6. Accidental release measures

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

7.2 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. Store locked up. 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.

7.3 Specific end use(s)

Recommendations: Industrial applications, Professional applications.

Industrial sector specific solutions: Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica, respirable powder</td>
<td>OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989 (United States, 3/1989). TWA: 0.1 mg/m³, (as quartz) 8 hours. Form: Respirable dust</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States, 5/2018). TWA: 50 µg/m³ 8 hours. Form: Respirable dust</td>
</tr>
<tr>
<td></td>
<td>ACGIH TLV (United States, 1/2021). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction</td>
</tr>
<tr>
<td></td>
<td>NIOSH REL (United States, 10/2020).</td>
</tr>
</tbody>
</table>

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## Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Environmental exposure controls</th>
<th>8.2 Exposure controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.</td>
</tr>
</tbody>
</table>

### Individual protection measures

#### Hygiene measures

Use appropriate techniques to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

#### 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. If operating conditions cause high dust concentrations to be produced, use dust goggles.

#### Skin 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### Hand 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.

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Section 8. Exposure controls/personal protection

**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**: Solid. [Pellets. / Granular solid. / Solid beads. / Powder.]
- **Color**: Tan. / White.
- **Odor**: Odorless.
- **Odor threshold**: Not available.
- **pH**: Not available.
- **Melting point/freezing point**: Not available.
- **Boiling point, initial boiling point, and boiling range**: Not available.
- **Flash point**: Not applicable.
- **Evaporation rate**: Not available.
- **Flammability**: Not available.
- **Lower and upper explosion limit/flamnability limit**: Not applicable.
- **Vapor pressure**: Not available.
- **Relative vapor density**: Not applicable.
- **Relative density**: Not available.
- **Solubility**: Insoluble in the following materials: cold water and hot water.
- **Miscible with water**: No.
- **Partition coefficient: n-octanol/water**: Not applicable.
- **Auto-ignition temperature**: Not applicable.
- **Decomposition temperature**: Not available.
- **Viscosity**: Not available.
- **Particle characteristics**
  - **Median particle size**: Not available.

Section 10. Stability and reactivity

10.1 Reactivity: No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability: The product is stable.

10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid: No specific data.

10.5 Incompatible materials: May react or be incompatible with oxidizing materials.

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Section 10. Stability and reactivity

Reactive or incompatible with the following materials: acids.

10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Not available.

Irritation/Corrosion
Not available.

Sensitization
Not available.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica, respirable powder</td>
<td>-</td>
<td>1</td>
<td>Known to be a human carcinogen.</td>
</tr>
<tr>
<td>cristobalite</td>
<td>-</td>
<td>1</td>
<td>Known to be a human carcinogen.</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica, respirable powder cristobalite</td>
<td>Category 1</td>
<td>inhalation</td>
<td>lungs</td>
</tr>
</tbody>
</table>

Aspiration hazard
Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

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Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:
- irritation
- redness

Inhalation: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

Skin contact: No specific data.

Ingestion: 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.
- Potential delayed effects: Not available.

Potential chronic health effects

General: Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.

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

12.1 Toxicity
Not available.

12.2 Persistence and degradability
Conclusion/Summary: This product is not expected to bioaccumulate through food chains in the environment.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Soil/water partition coefficient (K_{OC}): Not available.

12.5 Other adverse effects: No known significant effects or critical hazards.
Section 13. Disposal considerations

13.1 Waste treatment methods

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / 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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304 Composition/information on ingredients

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Section 15. Regulatory information

No products were found.

**SARA 304 RQ**
Not applicable.

**SARA 311/312**
Classification: CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica, respirable powder</td>
<td>≤10</td>
<td>CARCINOGENICITY - Category 1A</td>
</tr>
<tr>
<td>cristobalite</td>
<td>≤10</td>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)</td>
</tr>
</tbody>
</table>

**State regulations**

**Massachusetts**
The following components are listed: SILICA, CRYSTALLINE, QUARTZ; QUARTZ; SILICA CRYSTALLINE QUARTZ; CRISTOBALITE DUST; CRISTOBALITE ASBESTOS.

**New York**
None of the components are listed.

**New Jersey**
The following components are listed: SILICA, QUARTZ; QUARTZ (SiO2); SILICA, CRYSTALLINE-QUARTZ; SILICA, CRYSTALLINE; SILICA, CRISTOBALITE; CRISTOBALITE (SiO2); SILICA, CRYSTALLINE-CRISTOBALITE.

**Pennsylvania**
The following components are listed: QUARTZ DUST; QUARTZ; CRISTOBALITE DUST; CRISTOBALITE.

**California Prop. 65**

⚠️ WARNING: This product can expose you to chemicals including Silica, crystalline and Silica, crystalline, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**Ingredient name**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, crystalline</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silica, crystalline</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**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.

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

**UNECE Aarhus Protocol on POPs and Heavy Metals**
Not listed.

**Inventory list**

Australia: All components are listed or exempted.
Canada: Not determined.
China: All components are listed or exempted.
Europe: All components are listed or exempted.

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Section 15. Regulatory information

Japan: Japan inventory (CSCL): 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: All components are listed or exempted.

Turkey: All components are listed or exempted.

United States: All components are active or exempted.

Viet Nam: All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARCINOGENICITY - Category 1A</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

History

Date of issue : 09/29/2021
Date of previous issue : 04/28/2021
Version : 6.1

Key to abbreviations:
- 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
- UN = United Nations

Notice to reader

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