Section 1. Identification

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

1.1 Product identifier

Product name: AdvanceBioOligonucleotide, 21.2x150, 4µm, Part Number 671150-702
Part no.: 671150-702
Validation date: 11/22/2022

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

Identified uses: Analytical chemistry.
HPLC column
Solvent volume: 32 ml

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

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.

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

H225 FLAMMABLE LIQUIDS - Category 2
H319 EYE IRRITATION - Category 2A
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

2.2 GHS label elements

Hazard pictograms: 

Signal word: Danger
Hazard statements: H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation.
H373 - May cause damage to organs through prolonged or repeated exposure. (blood system, central nervous system (CNS), kidneys, liver)

Precautionary statements
Section 2. Hazards identification

**Prevention**
- P280 - Wear eye or face protection.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241 - Use explosion-proof electrical, ventilating or lighting equipment.
- P242 - Use non-sparking tools.
- P243 - Take action to prevent static discharges.
- P233 - Keep container tightly closed.
- P260 - Do not breathe vapor.

**Response**
- P314 - Get medical advice or attention if you feel unwell.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice or attention.

**Storage**
- P403 + P235 - Store in a well-ventilated place. Keep cool.

**Disposal**
- P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 Other hazards
Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients
This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.

**Substance/mixture** : Mixture (encapsulated in article)

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>≥10 - &lt;22</td>
<td>75-05-8</td>
</tr>
</tbody>
</table>

Contains: Organosilane bonded silica gel

Note: To the best of our knowledge, the acute and chronic toxicological properties of bonded silica gels have not been investigated. This product contains synthetic amorphous silica, and should not be confused with crystalline silica such as quartz, cristobalite, or tridymite, or with diatomaceous earth or other naturally occurring forms of amorphous silica that frequently contain crystalline forms of silica. Organosilane bonded silica gel

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

**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 following exposure or if feeling unwell. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Date of issue : 11/22/2022
Section 4. First aid measures

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. 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 following exposure or if feeling unwell. 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**: Causes serious eye irritation.
- **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**: Adverse symptoms may include the following: pain or irritation, watering, redness.
- **Inhalation**: No specific data.
- **Skin contact**: No specific data.
- **Ingestion**: No specific data.

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

- **Notes to physician**: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

- **Specific treatments**: No specific treatment.

- **Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 **Extinguishing media**

- **Suitable extinguishing media**: Use dry chemical, CO₂, water spray (fog) or foam.

- **Unsuitable extinguishing media**: Do not use water jet.

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

- **Specific hazards arising from the chemical**: Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
### Section 5. Fire-fighting measures

| Hazardous thermal decomposition products | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides cyanides |

**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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. 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).

6.3 Methods and materials for containment and cleaning up

- **Methods for cleaning up**: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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

7.1 Precautions for safe handling

- **Protective measures**: Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

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Section 7. Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>ACGIH TLV (United States, 1/2022). Absorbed through skin. TWA: 20 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 40 ppm 8 hours. TWA: 70 mg/m³ 8 hours. STEL: 60 ppm 15 minutes. STEL: 105 mg/m³ 15 minutes. NIOSH REL (United States, 10/2020). TWA: 20 ppm 10 hours. TWA: 34 mg/m³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 40 ppm 8 hours. TWA: 70 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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.

Individual protection measures

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Section 8. Exposure controls/personal protection

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: chemical splash goggles.

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. 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.

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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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 (containing flammable liquid)
Color: Not available.
Odor: Not available.
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: Closed cup: -18 to 23°C (-0.4 to 73.4°F)
Evaporation rate: Not available.
Flammability: Contains: Flammable liquid
Lower and upper explosion limit/flammbility limit: Not available.
Vapor pressure: 

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Section 9. Physical and chemical properties and safety characteristics

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Vapor Pressure at 20°C</th>
<th>Vapor pressure at 50°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm Hg</td>
<td>kPa</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>70.89</td>
<td>9.5</td>
</tr>
<tr>
<td>water</td>
<td>23.8</td>
<td>3.2</td>
</tr>
</tbody>
</table>

| Relative density | Not available. |
| Solubility(ies) |                |
| Partition coefficient: n-octanol/water | Not applicable. |
| Auto-ignition temperature |                |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Particle characteristics |                |
| Median particle size | Not applicable. |

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 | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials | Reactive or incompatible with the following materials: oxidizing materials. Incompatible with hydrogen fluoride.

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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>LC50 Inhalation Vapor LD50 Oral</td>
<td>Rat</td>
<td>17100 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
<td>2460 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Irritation/Corrosion

Date of issue: 11/22/2022
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 uL</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**
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)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>Category 2</td>
<td>-</td>
<td>blood system, central nervous system (CNS), kidneys, liver</td>
</tr>
</tbody>
</table>

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**
Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

**Potential acute health effects**

- **Eye contact**: Causes serious eye irritation.
- **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.

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

- **Eye contact**: Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

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

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### Section 11. Toxicological information

#### Potential delayed effects
- **Long term exposure**
  - Not available.

#### Potential immediate effects
- Not available.

#### Potential delayed effects
- Not available.

#### Potential chronic health effects

<table>
<thead>
<tr>
<th>General</th>
<th>May cause damage to organs through prolonged or repeated exposure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Numerical measures of toxicity

#### Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdvanceBioOligonucleotide, 21.2x150, 4µm, Part Number 671150-702 Acetonitrile</td>
<td>2381.0</td>
<td>5238.1</td>
<td>N/A</td>
<td>52.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Acetonitrile</td>
<td>500</td>
<td>1100</td>
<td>N/A</td>
<td>11</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Section 12. Ecological information

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>Acute IC50 3685000 µg/l Fresh water Acute LC50 3600000 µg/l Fresh water Acute LC50 1000000 µg/l Fresh water Chronic NOEC 1000000 µg/l Fresh water Chronic NOEC 160000 µg/l Fresh water</td>
<td>Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Pimephales promelas Aquatic plants - Lemna minor Daphnia - Daphnia magna</td>
<td>96 hours 48 hours 96 hours 21 days</td>
</tr>
</tbody>
</table>

#### 12.2 Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>OECD 310 Ready Biodegradability - CO₂ in Sealed Vessels (Headspace Test)</td>
<td>70 % - Readily - 21 days</td>
<td>-</td>
<td>Activated sludge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

#### 12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>-0.34</td>
<td>3</td>
<td>low</td>
</tr>
</tbody>
</table>
Section 12. Ecological information

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Status</th>
<th>Reference number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile (I,T)</td>
<td>75-05-8</td>
<td>Listed</td>
<td>U003</td>
</tr>
</tbody>
</table>

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

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN3175</td>
<td>UN3175</td>
<td>UN3175</td>
<td>UN3175</td>
<td>UN3175</td>
<td>UN3175</td>
</tr>
</tbody>
</table>

UN proper shipping name:

- Solids containing flammable liquid, n.o.s. (Acetonitrile)

DOT Classification: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Acetonitrile)

TDG Classification: SOLIDO QUE CONTIENE LIQUIDO INFLAMABLE, N. E.P. (Acetonitrile)

IMDG Classification: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Acetonitrile)

IATA Classification: Solids containing flammable liquid, n. o.s. (Acetonitrile)

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Section 14. Transport information

### Transport hazard class(es)

<table>
<thead>
<tr>
<th>DOT</th>
<th>Packing group</th>
<th>Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>II</td>
<td>No.</td>
</tr>
<tr>
<td>4.1</td>
<td>II</td>
<td>No.</td>
</tr>
<tr>
<td>4.1</td>
<td>II</td>
<td>No.</td>
</tr>
<tr>
<td>4.1</td>
<td>II</td>
<td>No.</td>
</tr>
<tr>
<td>4.1</td>
<td>II</td>
<td>No.</td>
</tr>
</tbody>
</table>

### DOT Classification

- **Reportable quantity** 23809.5 lbs / 10809.5 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- **Limited quantity** Yes.
- **Quantity limitation** Passenger aircraft/rail: 15 kg. Cargo aircraft: 50 kg.
- **Special provisions** 47, lD6, IP2, T3, TP3

### TDG Classification

- Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.20-2.22 (Class 4).
- **Explosive Limit and Limited Quantity Index** 1
- **Passenger Carrying Road or Rail Index** 15
- **Special provisions** 16, 56

### Mexico Classification

- **Special provisions** 216, 274

### IMDG

- **Emergency schedules** F-A, S-I
- **Special provisions** 216, 274

### IATA

- **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) PAIR**: Acetonitrile
- **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined
- **Clean Water Act (CWA) 307**: Acetonitrile
- **Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**: 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

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DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304 Composition/information on ingredients
No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312 Classification : FLAMMABLE LIQUIDS - Category 2
EYE IRRITATION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organosilane bonded silica gel Acetonitrile</td>
<td>≥50 - ≤75, ≥10 - &lt;22</td>
<td>COMBUSTIBLE DUSTS, FLAMMABLE LIQUIDS - Category 2, ACUTE TOXICITY (oral) - Category 4, ACUTE TOXICITY (dermal) - Category 4, ACUTE TOXICITY (inhalation) - Category 4, EYE IRRITATION - Category 2A, SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</td>
</tr>
</tbody>
</table>

SARA 313 Form R - Reporting requirements

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>≥10 - &lt;22</td>
</tr>
</tbody>
</table>

Supplier notification

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetonitrile</td>
<td>75-05-8</td>
<td>≥10 - &lt;22</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: ACETONITRILE
New York : The following components are listed: Acetonitrile
New Jersey : The following components are listed: ACETONITRILE
Pennsylvania : The following components are listed: ACETONITRILE

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

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.

UNEP Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

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Australia: All components are listed or exempted.
Canada: All components are listed or exempted.
China: All components are listed or exempted.
Eurasian Economic Union: Russian Federation inventory: All components are listed or exempted.
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: Not determined.
Republic of Korea: All components are listed or exempted.
Taiwan: All components are listed or exempted.
Thailand: Not determined.
Turkey: All components are listed or exempted.
United States: All components are active or exempted.
Viet Nam: Not determined.

Section 16. Other information

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABLE LIQUIDS - Category 2</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>EYE IRRITATION - Category 2A</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

History

Date of issue: 11/22/2022
Date of previous issue: No previous validation
Version: 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

Indicates information that has changed from previously issued version.

Notice to reader

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