

SAFETY DATA SHEET

A-Line charcoal filter

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 : A-Line charcoal filter

Part no. : 5043-1193

Validation date : 10/25/2024

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

Identified uses : Analytical chemistry.
58 g

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

H252 SELF-HEATING SUBSTANCES AND MIXTURES - Category 2
COMBUSTIBLE DUSTS

2.2 GHS label elements

Hazard pictograms : 

Signal word : Warning

Hazard statements : H252 - Self-heating in large quantities; may catch fire.
May form combustible dust concentrations in air.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Section 2. Hazards identification

| | |
|---|--|
| Storage | : P413 - Store bulk masses greater than 0.058 kg/0.1276 lbs at temperatures not exceeding 25 °C/77 °F. P407 - Maintain air gap between stacks or pallets. P420 - Store separately. |
| Disposal | : Not applicable. |
| Supplemental label elements | : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation. |
| 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 : Substance (encapsulated in article)

| Ingredient name | % | CAS number |
|-------------------|-----|------------|
| Carbon, Activated | 100 | 7440-44-0 |

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. Get medical attention if irritation occurs. |
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| Skin contact | : Wash contaminated skin with soap and 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. |

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 |
|--------------------|--|

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.

4.3 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)

Section 5. Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Avoid high pressure media which could cause the formation of a potentially explosive dust-air mixture.

5.2 Special hazards arising from the substance or mixture

- Specific hazards arising from the chemical** : Self-heating material when in large quantities. May catch fire. May form explosive dust-air mixture if dispersed.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

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.
- Remark** : Material in powder form, capable of creating a dust explosion.

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 dust. 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).

Section 6. Accidental release measures

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. May form explosive dust-air mixture if dispersed. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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 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. Store bulk masses greater than 0.058 kg/0.1276 lbs at temperatures not exceeding 25 °C/77 °F. Eliminate all ignition sources. Separate from oxidizing materials. Store away from other materials. Maintain air gap between stacks/pallets. 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

| Ingredient name | Exposure limits |
|-------------------|-----------------|
| Carbon, Activated | None. |

Biological exposure indices

No exposure indices known.

Section 8. Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls

- : Use only with adequate ventilation. Engineering controls may be required to control the primary or secondary risks associated with this product. 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

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

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. [Powder.] |
| Color | : Dark grey. |
| Odor | : Odorless. |
| Odor threshold | : Not available. |
| pH | : Not available. |
| Melting point/freezing point | : >500°C (>932°F) |

Section 9. Physical and chemical properties and safety characteristics

| Boiling point, initial boiling point, and boiling range | : | 4000°C (7232°F) | | | | |
|---|-----------|--|-------|--------|-------|-----------|
| Flash point | : | Not applicable. | | | | |
| Evaporation rate | : | Not available. | | | | |
| Flammability | : | Not available. | | | | |
| Lower and upper explosion limit/flammability limit | : | Not applicable. | | | | |
| Vapor pressure | : | Not available. | | | | |
| Relative vapor density | : | Not applicable. | | | | |
| Relative density | : | 1.8 to 3.51 | | | | |
| Density | : | 1.78 g/cm³ [25°C (77°F)] | | | | |
| Solubility(ies) | : | <table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td>Water</td> <td>Insoluble</td> </tr> </tbody> </table> | Media | Result | Water | Insoluble |
| Media | Result | | | | | |
| Water | Insoluble | | | | | |
| Solubility in water | : | 0 g/l [OECD 105] | | | | |
| Partition coefficient: n-octanol/water | : | Not available. | | | | |
| Auto-ignition temperature | : | <200°C (<392°F) [UN N.4] | | | | |
| Decomposition temperature | : | Not available. | | | | |
| Heat of combustion | : | 32796600 J/kg | | | | |
| Viscosity | : | Not applicable. | | | | |
| <u>Particle characteristics</u> | | | | | | |
| Median particle size | : | Not available. | | | | |

Section 10. Stability and reactivity

| | | |
|---|---|---|
| 10.1 Reactivity | : | This product, by reaction with air and without energy supply, is liable to self-heat and will ignite when in large amounts and after long periods of time. The spontaneous ignition temperature will be ≤ 50°C for a volume of 27 m³. |
| 10.2 Chemical stability | : | The product is stable. |
| 10.3 Possibility of hazardous reactions | : | Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: extended contact with air in bulk storage Reactions may include the following: risk of causing fire spontaneous flammability |
| 10.4 Conditions to avoid | : | Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation. |
| 10.5 Incompatible materials | : | Reactive or incompatible with the following materials: oxidizing materials |
| 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.

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 : Not available.

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.

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.

Section 11. Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

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

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|----------------------------------|---------|----------|
| Carbon, Activated | Acute LC50 >100 mg/l Fresh water | Fish | 96 hours |

12.2 Persistence and degradability

Not available.

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.

Section 13. Disposal considerations

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.

DOT / TDG / Mexico / IMDG / : Not regulated.

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) CDR Exempt/Partial exemption:** This material is listed or exempted.

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

DEA List I Chemicals (Precursor Chemicals) : Not listed

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 : **SELF-HEATING SUBSTANCES AND MIXTURES - Category 2**
COMBUSTIBLE DUSTS

Composition/information on ingredients

Section 15. Regulatory information

| Name | % | Classification |
|-------------------|-----|--|
| Carbon, Activated | 100 | SELF-HEATING SUBSTANCES AND MIXTURES - Category 2 COMBUSTIBLE DUSTS |

State regulations

| | |
|----------------------------|--------------------------------|
| Massachusetts | : This material is not listed. |
| New York | : This material is not listed. |
| New Jersey | : This material is not listed. |
| Pennsylvania | : This material is not listed. |
| 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.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|-------------------|--|
| Australia | : This material is listed or exempted. |
| Canada | : This material is listed or exempted. |
| China | : This material is listed or exempted. |
| Japan | : Japan inventory (CSCL) : This material is listed or exempted. Japan inventory (ISHL) : This material is listed or exempted. |
| New Zealand | : This material is listed or exempted. |
| Philippines | : This material is listed or exempted. |
| Republic of Korea | : This material is listed or exempted. |
| Taiwan | : This material is listed or exempted. |
| Thailand | : This material is listed or exempted. |
| Turkey | : This material is listed or exempted. |
| United States | : This material is active or exempted. |
| Viet Nam | : This material is listed or exempted. |

Section 16. Other information

Procedure used to derive the classification

| Classification | Justification |
|--|------------------------------------|
| SELF-HEATING SUBSTANCES AND MIXTURES - Category 2 COMBUSTIBLE DUSTS | Expert judgment Expert judgment |

History

Date of issue/Date of revision : 10/25/2024

Section 16. Other information

| | | |
|-------------------------------|---|--|
| Date of previous issue | : | 08/30/2021 |
| Version | : | 5 |
| 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 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations |

 Indicates information that has changed from previously issued version.

Notice to reader

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