

Safety Data Sheet acc. to OSHA HCS

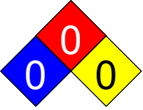
Printing date 06/24/2022

Reviewed on 06/24/2022

1 Identification

- **Product identifier**
- **Trade name:** Trace Metals on Filter Media
- **Article number:** QC-TMFM-F
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
High-Purity Standards
7221 Investment Drive, North Charleston, SC 29418 United States
Telephone: +1-843-767-7900
Fax: +1-843-767-7906
highpuritystandards.com
Email: info@highpuritystandards.com
- **Information department:** Product safety department
- **Emergency telephone number:**
INFOTRAC
Emergency telephone numbers 1-800-535-5053
Other emergency telephone numbers 1-352-323-3500

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 0
Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	0
REACTIVITY	0

Health = 0
Fire = 0
Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

US

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 1)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

9004-70-0	nitrocellulose, dry or wetted with less than 25% water (or alcohol), by mass	≤90.0%
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· **Chemical identification of the substance/preparation**

9004-35-7	Cellulose Acetate	≤10.0%
7440-38-2	arsenic	0.023%
7439-89-6	iron	0.006%
7439-92-1	lead	0.006%
7440-02-0	nickel	0.006%
7440-28-0	thallium	0.006%
7440-39-3	barium	0.006%
7440-47-3	chromium	0.006%
7440-48-4	cobalt	0.006%
7440-50-8	copper	0.006%
7440-62-2	vanadium	0.006%
7440-66-6	zinc	0.006%
10102-06-4	Uranyl nitrate	0.006%
7439-96-5	manganese	0.003%
7440-22-4	silver	0.003%
7440-41-7	beryllium	0.003%
7440-43-9	cadmium	0.003%

4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

US

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 2)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

7440-38-2	arsenic	1.5 mg/m ³
7439-89-6	iron	3.2 mg/m ³
7439-92-1	lead	0.15 mg/m ³
7440-02-0	nickel	4.5 mg/m ³
7440-28-0	thallium	0.06 mg/m ³
7440-39-3	barium	1.5 mg/m ³
7440-47-3	chromium	1.5 mg/m ³
7440-48-4	cobalt	0.18 mg/m ³
7440-50-8	copper	3 mg/m ³
7440-62-2	vanadium	3 mg/m ³
7440-66-6	zinc	6 mg/m ³
10102-06-4	Uranyl nitrate	0.99 mg/m ³
7439-96-5	manganese	3 mg/m ³
7440-22-4	silver	0.3 mg/m ³
7440-41-7	beryllium	0.0023 mg/m ³
7440-43-9	cadmium	0.10 mg/m ³

· **PAC-2:**

7440-38-2	arsenic	17 mg/m ³
7439-89-6	iron	35 mg/m ³
7439-92-1	lead	120 mg/m ³
7440-02-0	nickel	50 mg/m ³

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 3)

7440-28-0	thallium	3.3 mg/m ³
7440-39-3	barium	180 mg/m ³
7440-47-3	chromium	17 mg/m ³
7440-48-4	cobalt	2 mg/m ³
7440-50-8	copper	33 mg/m ³
7440-62-2	vanadium	5.8 mg/m ³
7440-66-6	zinc	21 mg/m ³
10102-06-4	Uranyl nitrate	5.5 mg/m ³
7439-96-5	manganese	5 mg/m ³
7440-22-4	silver	170 mg/m ³
7440-41-7	beryllium	0.025 mg/m ³
7440-43-9	cadmium	0.76 mg/m ³

· PAC-3:

7440-38-2	arsenic	100 mg/m ³
7439-89-6	iron	150 mg/m ³
7439-92-1	lead	700 mg/m ³
7440-02-0	nickel	99 mg/m ³
7440-28-0	thallium	20 mg/m ³
7440-39-3	barium	1,100 mg/m ³
7440-47-3	chromium	99 mg/m ³
7440-48-4	cobalt	20 mg/m ³
7440-50-8	copper	200 mg/m ³
7440-62-2	vanadium	35 mg/m ³
7440-66-6	zinc	120 mg/m ³
10102-06-4	Uranyl nitrate	33 mg/m ³
7439-96-5	manganese	1,800 mg/m ³
7440-22-4	silver	990 mg/m ³
7440-41-7	beryllium	0.1 mg/m ³
7440-43-9	cadmium	4.7 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 4)

- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**

Form:	Solid
Color:	Whitish
 - **Odor:** Characteristic
 - **Odor threshold:** Not determined.
- | | |
|------------------|-----------------|
| pH-value: | Not applicable. |
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(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 5)

· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
VOC content:	0.00 %
Solids content:	80.1-90.1 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 6)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7440-38-2	arsenic	I
7439-92-1	lead	2B
7440-02-0	nickel	2B
7440-47-3	chromium	3
7440-48-4	cobalt	2B
7440-41-7	beryllium	I
7440-43-9	cadmium	I

· **NTP (National Toxicology Program)**

7440-38-2	arsenic	K
7439-92-1	lead	R
7440-02-0	nickel	R
7440-48-4	cobalt	R
7440-41-7	beryllium	K
7440-43-9	cadmium	K

· **OSHA-Ca (Occupational Safety & Health Administration)**

7440-38-2	arsenic
7440-43-9	cadmium

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 7)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	not regulated
· UN proper shipping name	
· DOT, ADR, IMDG, IATA	not regulated
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· DOT, ADR, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

US

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 8)

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7440-38-2	arsenic
7439-92-1	lead
7440-02-0	nickel
7440-28-0	thallium
7440-39-3	barium
7440-47-3	chromium
7440-48-4	cobalt
7440-50-8	copper
7440-62-2	vanadium
7440-66-6	zinc
7439-96-5	manganese
7440-22-4	silver
7440-41-7	beryllium
7440-43-9	cadmium

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

7439-92-1	lead
7440-48-4	cobalt
7439-96-5	manganese

· **Proposition 65**

· **Chemicals known to cause cancer:**

7440-38-2	arsenic
7439-92-1	lead
7440-02-0	nickel
7440-48-4	cobalt
7440-41-7	beryllium
7440-43-9	cadmium

· **Chemicals known to cause reproductive toxicity for females:**

7439-92-1	lead
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(Contd. on page 10)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 9)

· Chemicals known to cause reproductive toxicity for males:

7439-92-1	lead
7440-43-9	cadmium

· Chemicals known to cause developmental toxicity:

7439-92-1	lead
7440-43-9	cadmium

· Carcinogenic categories

· EPA (Environmental Protection Agency)

7440-38-2	arsenic	A
7439-92-1	lead	B2
7440-39-3	barium	D, CBD(inh), NL(oral)
7440-47-3	chromium	D
7440-50-8	copper	D
7440-66-6	zinc	D, I, II
7439-96-5	manganese	D
7440-22-4	silver	D
7440-41-7	beryllium	B1, K/L(inh), CBD(oral)
7440-43-9	cadmium	B1

· TLV (Threshold Limit Value)

7440-38-2	arsenic	A1
7439-92-1	lead	A3
7440-02-0	nickel	A5
7440-39-3	barium	A4
7440-47-3	chromium	A4
7440-48-4	cobalt	A3
7440-41-7	beryllium	A1
7440-43-9	cadmium	A2

· NIOSH-Ca (National Institute for Occupational Safety and Health)

7440-38-2	arsenic
7440-02-0	nickel
10102-06-4	Uranyl nitrate
7440-41-7	beryllium
7440-43-9	cadmium

- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/24/2022

Reviewed on 06/24/2022

Trade name: Trace Metals on Filter Media

(Contd. of page 10)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Contact:**

High-Purity Standards

Tel: 843-767-7900

Fax: 843-767-7906

· **Date of preparation / last revision** 06/24/2022 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit