

Safety Data Sheet acc. to OSHA HCS

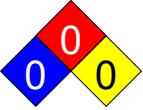
Printing date 03/29/2022

Reviewed on 03/29/2022

1 Identification

- **Product identifier**
- **Trade name:** Trace Metals on Filter Media
- **Article number:** QC-TMFM-E
- **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.

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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%
7429-90-5	aluminium	0.26%
513-77-9	barium carbonate	0.13%
7440-38-2	arsenic	0.05%
7439-89-6	iron	0.013%
7439-92-1	lead	0.013%
7440-02-0	nickel	0.013%
7440-28-0	thallium	0.013%
7440-47-3	chromium	0.013%
7440-48-4	cobalt	0.013%
7440-50-8	copper	0.013%
7440-66-6	zinc	0.013%
7803-55-6	Ammonium Vanadate	0.013%
7439-96-5	manganese	0.005%
7440-22-4	silver	0.005%
7440-43-9	cadmium	0.005%
19049-40-2	Beryllium acetate, basic	0.0005%

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.

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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:**

513-77-9	barium carbonate	2.2 mg/m ³
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
7440-47-3	chromium	1.5 mg/m ³
7440-48-4	cobalt	0.18 mg/m ³
7440-50-8	copper	3 mg/m ³
7440-66-6	zinc	6 mg/m ³
7803-55-6	Ammonium Vanadate	0.01 mg/m ³
7439-96-5	manganese	3 mg/m ³
7440-22-4	silver	0.3 mg/m ³
7440-43-9	cadmium	0.10 mg/m ³

· **PAC-2:**

513-77-9	barium carbonate	270 mg/m ³
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
7440-28-0	thallium	3.3 mg/m ³

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7440-47-3	chromium	17 mg/m ³
7440-48-4	cobalt	2 mg/m ³
7440-50-8	copper	33 mg/m ³
7440-66-6	zinc	21 mg/m ³
7803-55-6	Ammonium Vanadate	0.11 mg/m ³
7439-96-5	manganese	5 mg/m ³
7440-22-4	silver	170 mg/m ³
7440-43-9	cadmium	0.76 mg/m ³

· PAC-3:

513-77-9	barium carbonate	1,600 mg/m 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
7440-47-3	chromium	99 mg/m ³
7440-48-4	cobalt	20 mg/m ³
7440-50-8	copper	200 mg/m ³
7440-66-6	zinc	120 mg/m ³
7803-55-6	Ammonium Vanadate	80 mg/m ³
7439-96-5	manganese	1,800 mg/m ³
7440-22-4	silver	990 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.
- **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.

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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.
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
- **Flash point:** Not applicable.

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· 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:	100.0 %
· 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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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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
7440-43-9	cadmium	I
19049-40-2	Beryllium acetate, basic	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
7440-43-9	cadmium	K
19049-40-2	Beryllium acetate, basic	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.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

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- **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 MARPOL 73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

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

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· **Sara**

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

None of the ingredients is listed.

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

7429-90-5	aluminium
513-77-9	barium carbonate
7440-38-2	arsenic
7439-92-1	lead
7440-02-0	nickel
7440-28-0	thallium
7440-47-3	chromium
7440-48-4	cobalt
7440-50-8	copper
7440-66-6	zinc
7803-55-6	Ammonium Vanadate
7439-96-5	manganese
7440-22-4	silver
7440-43-9	cadmium
19049-40-2	Beryllium acetate, basic

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

9004-70-0	nitrocellulose, dry or wetted with less than 25% water(or alcohol), by mass	ACTIVE
9004-35-7	Cellulose Acetate	ACTIVE
7429-90-5	aluminium	ACTIVE
513-77-9	barium carbonate	ACTIVE
7440-38-2	arsenic	ACTIVE
7439-89-6	iron	ACTIVE
7439-92-1	lead	ACTIVE
7440-02-0	nickel	ACTIVE
7440-28-0	thallium	ACTIVE
7440-47-3	chromium	ACTIVE
7440-48-4	cobalt	ACTIVE
7440-50-8	copper	ACTIVE
7440-66-6	zinc	ACTIVE
7803-55-6	Ammonium Vanadate	ACTIVE
7439-96-5	manganese	ACTIVE
7440-22-4	silver	ACTIVE
7440-43-9	cadmium	ACTIVE

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· 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	
7440-43-9	cadmium	
19049-40-2	Beryllium acetate, basic	
· Chemicals known to cause reproductive toxicity for females:		
7439-92-1	lead	
· 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)		
513-77-9	barium carbonate	D, CBD(inh), NL(oral)
7440-38-2	arsenic	A
7439-92-1	lead	B2
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
7440-43-9	cadmium	B1
· TLV (Threshold Limit Value)		
7429-90-5	aluminium	A4
513-77-9	barium carbonate	A4
7440-38-2	arsenic	A1
7439-92-1	lead	A3
7440-02-0	nickel	A5

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7440-47-3	chromium	A4
7440-48-4	cobalt	A3
7440-43-9	cadmium	A2

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

7440-38-2	arsenic
7440-02-0	nickel
7440-43-9	cadmium
19049-40-2	Beryllium acetate, basic

- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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** 03/29/2022 / -
- **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