Safety Data Sheet
acc. to OSHA HCS

Printing date 12/16/2019

Reviewed on 08/20/2019

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1 Identification

· *This Safety Data Sheet is written based on the encapsulated substance or mixture in this article except as noted in section 15 where components of the filter body are also considered. Section 15 includes REACH and Proposition 65 warnings regarding the presence of Lead in brass alloys in the fittings or fitting plugs.*
· **Product identifier:** *Gas purifying filter*

· **Trade name:** ***CRS SPure™ HC Filters***
· **Part numbers:**

202326-4-PC	202326L-SS-QC	202326R-SS	202327-B-QC	202327R-SS	209027-B-QC	209027D-B
202326-6-PC	202326R-4-PC	202326R-SS-QC	202327D-B	202327R-SS-QC	209027-SS	209027D-B-QC
202326-B	202326R-6-PC	202326RXL-4-PC	202327D-B-QC	202327RXL-B	209027-SS-QC	209027D-SS
202326-B-QC	202326R-B	202326RXL-6-PC	202327D-SS	202327RXL-B-QC	209026L-4-PC	209027D-SS-QC
202326D-4-PC	202326R-B-QC	202326RXL-B	202327D-SS-QC	202327RXL-SS	209026L-6-PC	209026XL-4-PC
202326D-6-PC	202326RD-4-PC	202326RXL-B-QC	202327L-B	202327RXL-SS-QC	209026L-B	209026XL-6-PC
202326D-B	202326RD-6-PC	202326RXL-SS	202327L-B-QC	202327-SS	209026L-B-QC	209026XL-B
202326D-B-QC	202326RD-B	202326RXL-SS-QC	202327L-SS	202327-SS-QC	209026L-SS	209026XL-B-QC
202326DRP-B-QC	202326RD-B-QC	202326-SS	202327L-SS-QC	202327XL-B	209026L-SS-QC	209026XL-SS
202326DRP-SS-QC	202326RD-SS	202326-SS-QC	202327R-B	202327XL-B-QC	209027L-B	209026XL-SS-QC
202326D-SS	202326RD-SS-QC	202326XL-4-PC	202327R-B-QC	202327XL-SS	209027L-B-QC	209027XL-B
202326D-SS-QC	202326RL-4-PC	202326XL-6-PC	202327RD-B	202327XL-SS-QC	209027L-SS	209027XL-B-QC
202326L-4-PC	202326RL-6-PC	202326XL-B	202327RD-B-QC	209026-4-PC	209027L-SS-QC	209027XL-SS
202326L-6-PC	202326RL-B	202326XL-B-QC	202327RD-SS	209026-6-PC	209026D-4-PC	209027XL-SS-QC
202326L-B	202326RL-B-QC	202326XLRP-B-QC	202327RD-SS-QC	209026-B	209026D-6-PC	
202326L-B-QC	202326RL-SS	202326XLRP-SS-C	202327RL-B	209026-B-QC	209026D-B	
202326LRP-B-QC	202326RL-SS-QC	202326XL-SS	202327RL-B-QC	209026-SS	209026D-B-QC	
202326LRP-SS-QC	202326RP-B-QC	202326XL-SS-QC	202327RL-SS	209026-SS-QC	209026D-SS	
202326L-SS	202326RP-SS-QC	202327-B	202327RL-SS-QC	209027-B	209026D-SS-QC	

· **SDS number:** *SDS-0054*
· **CAS Number:**
7440-44-0
· **EC number:**
231-153-3
· **Application of the substance / the mixture** *Gas purification*

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Chromatography Research Supplies, Inc.
2601 Technology Drive
Louisville, KY 40299 USA
sds@chromres.com

· **Information department:** *Product safety department*
· **Emergency telephone number:**
From U.S.A., Canada, Puerto Rico and U.S. Virgin Islands
+1-502-491-6300 8 am - 5 pm East Coast U.S. Time
+1-800-255-3924 ChemTel (24 Hours) Contract Number MIS3660977
From Outside the U.S.A., Canada, Puerto Rico or U.S. Virgin Islands
+01-813-248-0585 ChemTel (24 Hours)
Additional In-Country numbers:
China: 400-120-0751; Brazil: 0-800-591-6042; India: 000-800-100-4086; Mexico: 01-800-099-0731.

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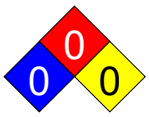
Trade name: CRS SPure™ HC Filters

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2 Hazard(s) identification

· **Classification of the substance or mixture**
Combustible Dust May form combustible dust concentrations in air.

· **Label elements**
· **GHS label elements** *The substance is classified and labeled according to the Globally Harmonized System (GHS).*
· **Hazard pictograms** *Void*
· **Signal word** *Warning*
· **Hazard statements**
May form combustible dust concentrations in air.
· **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.*

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
7440-44-0 Carbon
· **Identification number(s)**
· **EC number:** *231-153-3*

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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.*
· **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.*

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· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:** No special measures required.
· **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:**
Substance is not listed.

· **PAC-2:**
Substance is not listed.

· **PAC-3:**
Substance is not listed.

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7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
• Do not open cartridge.
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:** Not required.
· **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.

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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.

· **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:** • *Safety glasses with side shields*

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9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	*Granulate*
Color:	*Dark*
· **Odor:**	*Odorless*
· **Odor threshold:**	*Not determined.*
· **pH-value:**	*Not applicable.*
· **Change in condition**	
Melting point/Melting range:	*3,550 °C (38.450 °F)*
Boiling point/Boiling range:	*4,827 °C (40.727 °F)*
· **Flash point:**	*Not applicable.*
· **Flammability (solid, gaseous):**	*Product is not flammable.*
· **Ignition temperature:**	*>220 °C (>428 °F)*
· **Decomposition temperature:**	*Not determined.*
· **Auto igniting:**	*Not determined.*
· **Danger of explosion:**	*Product does not present an explosion hazard.*
· **Explosion limits:**	
Lower:	*Not determined.*
Upper:	*Not determined.*
· **Vapor pressure:**	*Not applicable.*
· **Density at 20 °C (68 °F):**	*1 g/cm³ (8.3 lbs/gal)*
· **Bulk density:**	*500 kg/m³*
· **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.*
VOC content:	*0.00 %*

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· **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:**
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.
The substance is not subject to classification.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
Substance is not listed.

· **NTP (National Toxicology Program)**
Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.

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.
· **Additional ecological information:**
· **General notes:** Not hazardous for water.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

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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.

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14 Transport information

· **UN-Number** · **ADR, ADN, IMDG, IATA**	Void
· **UN proper shipping name** · **ADR, ADN, IMDG, IATA**	Void
· **Transport hazard class(es)** · **ADR, ADN, IMDG** · **Class**	Void
· **IATA** · **Class**	Void • Not applicable. See note 1 below.
· **Packing group** · **ADR, IMDG, IATA**	Void
· **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.
· **Transport/Additional information:**	Note 1: Under the UN classification for activated carbon, all activated carbons have been identified as a class 4.2 product. However, this product type or an equivalent has been tested according to the "United Nations Transport of Dangerous Good"s test protocol for a "self-heating substance" (United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Section 33.3.1.6 - Test N.4 - Test Method for Self Heating Substances) and it has been specifically determined that this product type or an equivalent does not meet the definition of a self heating substance (class 4.2) or any other hazard class, and therefore should not be listed as a DOT hazardous material.
· **UN "Model Regulation":**	Void

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
REACH Notification: In conformance to REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council, this is notification that purifiers made by CRS include components machined from copper alloys containing lead (Brass) above the 0.1% w/w threshold, where it is an integral part of the Article. Included products are the fittings and / or fitting plugs. Copper alloys such as brass in it's solid form and under normal conditions do not present an inhalation, ingestion or contact health hazard of the regulated substance. Operations such as welding, excessive heating or dust generating activities, such as machining, may create a health hazard. Under normal use, CRS' products are not designed

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or anticipated to release these regulated substances.

· **Sara**

· **Section 355 (extremely hazardous substances):**
Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**
Substance is not listed.

· **TSCA (Toxic Substances Control Act):**
Substance is not listed.

· **Hazardous Air Pollutants**
Substance is not listed.

· **Proposition 65**



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

· **Chemicals known to cause cancer:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.

· **Chemicals known to cause developmental toxicity:**
Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.

· **GHS label elements** *The substance is classified and labeled according to the Globally Harmonized System (GHS).*
· **Hazard pictograms** *Void*
· **Signal word** *Warning*
· **Hazard statements**
May form combustible dust concentrations in air.
· **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:** *Product safety department*
· **Contact:** *Product Safety Department*
· **Date of preparation / last revision** *12/16/2019 / -*
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial 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

· **** Data compared to the previous version altered.***

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