Safety Data Sheet
acc. to OSHA HCS

Printing date 12/16/2019
Reviewed on 08/19/2019

*
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™ H2O/HC Filter***
· ***Part numbers:***

202324-4-PC	202324L-SS-QC	202324R-SS	202325-B-QC	202325R-SS	209025-B-QC	209025D-B
202324-6-PC	202324R-4-PC	202324R-SS-QC	202325D-B	202325R-SS-QC	209025-SS	209025D-B-QC
202324-B	202324R-6-PC	202324RXL-4-PC	202325D-B-QC	202325RXL-B	209025-SS-QC	209025D-SS
202324-B-QC	202324R-B	202324RXL-6-PC	202325D-SS	202325RXL-B-QC	209024L-4-PC	209025D-SS-QC
202324D-4-PC	202324R-B-QC	202324RXL-B	202325D-SS-QC	202325RXL-SS	209024L-6-PC	209024XL-4-PC
202324D-6-PC	202324RD-4-PC	202324RXL-B-QC	202325L-B	202325RXL-SS-QC	209024L-B	209024XL-6-PC
202324D-B	202324RD-6-PC	202324RXL-SS	202325L-B-QC	202325-SS	209024L-B-QC	209024XL-B
202324D-B-QC	202324RD-B	202324RXL-SS-QC	202325L-SS	202325-SS-QC	209024L-SS	209024XL-B-QC
202324DRP-B-QC	202324RD-B-QC	202324-SS	202325L-SS-QC	202325XL-B	209024L-SS-QC	209024XL-SS
202324DRP-SS-QC	202324RD-SS	202324-SS-QC	202325R-B	202325XL-B-QC	209025L-B	209024XL-SS-QC
202324D-SS	202324RD-SS-QC	202324XL-4-PC	202325R-B-QC	202325XL-SS	209025L-B-QC	209025XL-B
202324D-SS-QC	202324RL-4-PC	202324XL-6-PC	202325RD-B	202325XL-SS-QC	209025L-SS	209025XL-B-QC
202324L-4-PC	202324RL-6-PC	202324XL-B	202325RD-B-QC	209024-4-PC	209025L-SS-QC	209025XL-SS
202324L-6-PC	202324RL-B	202324XL-B-QC	202325RD-SS	209024-6-PC	209024D-4-PC	209025XL-SS-QC
202324L-B	202324RL-B-QC	202324XLRP-B-QC	202325RD-SS-QC	209024-B	209024D-6-PC	
202324L-B-QC	202324RL-SS	202324XLRP-SS-QC	202325RL-B	209024-B-QC	209024D-B	
202324LRP-B-QC	202324RL-SS-QC	202324XL-SS	202325RL-B-QC	209024-SS	209024D-B-QC	
202324LRP-SS-QC	202324RP-B-QC	202324XL-SS-QC	202325RL-SS	209024-SS-QC	209024D-SS	
202324L-SS	202324RP-SS-QC	202325-B	202325RL-SS-QC	209025-B	209024D-SS-QC	

· ***SDS number:*** *SDS-0053*
· ***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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2 Hazard(s) identification

· ***Classification of the substance or mixture***



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Carc. 1A H350 May cause cancer.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Quartz (SiO2)
· **Hazard statements**
H350 May cause cancer.
· **Precautionary statements**
• Do not open purifier.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



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:**			
7440-44-0	Carbon	Combustible Dust	10-45%
14808-60-7	Quartz (SiO2)	Carc. 1A, H350	<2%

· **Additional Components**		
7631-86-9	Silicon dioxide, chemically prepared	10-35%
1318-02-1	Zeolite	10-35%

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1327-43-1	Magnesium aluminosilicate clay	1-5%
7786-30-3	Magnesium Dichloride	<1%
10125-13-0	Copper (II) chloride dihydrate Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	<0.1%

4 First-aid measures

· **Description of first aid measures**
· **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.
· **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:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **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:**		
7631-86-9	Silicon dioxide, chemically prepared	18 mg/m³
14808-60-7	Quartz (SiO2)	0.075 mg/m³
7786-30-3	Magnesium Dichloride	11 mg/m³
10125-13-0	Copper (II) chloride dihydrate	8 mg/m³

· **PAC-2:**		
7631-86-9	Silicon dioxide, chemically prepared	740 mg/m³
14808-60-7	Quartz (SiO2)	33 mg/m³
7786-30-3	Magnesium Dichloride	120 mg/m³
10125-13-0	Copper (II) chloride dihydrate	89 mg/m³

· **PAC-3:**		
7631-86-9	Silicon dioxide, chemically prepared	4,500 mg/m³

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14808-60-7	Quartz (SiO2)	200 mg/m³
7786-30-3	Magnesium Dichloride	550 mg/m³
10125-13-0	Copper (II) chloride dihydrate	530 mg/m³

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7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
• Do not open cartridge.
Ensure good ventilation/exhaustion at the workplace.
· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **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:** Keep receptacle tightly sealed.
· **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 following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

14808-60-7 Quartz (SiO2)	
PEL	Long-term value: 0.05* mg/m³ *resp. dust; 30mg/m3/%SiO2+2
REL	Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m³ *as respirable fraction

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**



Protective gloves

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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:** • 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:	Various colors
· **Odor:**	Odorless
· **Odor threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>999 °C (>1,830.2 °F)
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Not determined.
· **Ignition temperature:**	>220 °C (>428 °F)
· **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.

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· **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 shows the following dangers according to internally approved calculation methods for preparations:

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
7631-86-9	Silicon dioxide, chemically prepared	3
1318-02-1	Zeolite	3
14808-60-7	Quartz (SiO2)	1

· **NTP (National Toxicology Program)**		
14808-60-7	Quartz (SiO2)	K

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is 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:**
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.

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· **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:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number** · **DOT, ADR, IMDG, IATA**	Void
· **UN proper shipping name** · **DOT, ADR, IMDG, IATA**	Void
· **Transport hazard class(es)**	
· **DOT, ADR, IMDG** · **Class**	Void
· **IATA** · **Class**	Void • Not applicable. See note 1 below.
· **Packing group** · **DOT, 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 or anticipated to release these regulated substances.

· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

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

7631-86-9	Silicon dioxide, chemically prepared	ACTIVE
1327-43-1	Magnesium aluminosilicate clay	ACTIVE
14808-60-7	Quartz (SiO2)	ACTIVE
7786-30-3	Magnesium Dichloride	ACTIVE

· **Hazardous Air Pollutants**
None of the ingredients is listed.

· **Proposition 65**



WARNING: This product can expose you to chemicals including quartz (SiO2), which is known to the State of California to cause cancer, and lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

· **Chemicals known to cause cancer:**

14808-60-7	Quartz (SiO2)

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

14808-60-7	Quartz (SiO2)	A2

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

14808-60-7	Quartz (SiO2)

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



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· **Signal word** Danger

· **Hazard-determining components of labeling:**
Quartz (SiO2)
· **Hazard statements**
H350 May cause cancer.
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
IF exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**
· **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
· **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:**
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
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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
Carc. 1A: Carcinogenicity – Category 1A
· *** Data compared to the previous version altered.**

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