

1 Identification

- **This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.**
- **Product identifier:** Gas purifying filter
- **Trade name:** CRS ZPure Glass H2O / HC Purifier
- **Article number:** 202256-B, 202256-SS, 202257-B, 202257-SS
- **SDS number:** 991061
- **Application of the substance / the preparation** Purifying gas
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Chromatography Research Supplies, Inc.
2601 Technology Drive
Louisville, KY 40299 USA
msds@chromres.com
- **Information department:** Product safety department
- **Emergency telephone number:**
During normal opening times: +1 (502) 491-6300
CHEMTREC (24 Hours) 800-424-9300 (U.S.A.)
When Calling from Outside the U.S.A., Dial Your Access Code for the U.S.A., then 1, then 703-527-3887.

2 Hazard(s) identification

- **Classification of the substance or mixture**
H320 Causes eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** Void
- **Signal word** Warning
- **Hazard statements**
Causes eye irritation.
- **Precautionary statements**
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wash thoroughly after handling.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

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

· **Dangerous components:**

7440-44-0	Carbon	H320	40-70%
1344-28-1	Aluminum oxide		0-20%
1305-78-8	Calcium oxide	⚠ H318	0-10%
14808-60-7	Quartz (SiO ₂)		<2%

· **Additional Components**

7631-86-9	Silicon dioxide, chemically prepared		0-60%
1313-59-3	Sodium oxide		0-10%
10125-13-0	Copper (II) chloride dihydrate		<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.
- **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.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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.

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- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** • Do not open cartridge. Contents may become hot on exposure to water.
- **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.

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:**

1344-28-1 Aluminum oxide

PEL	Long-term value: 15*; 15** mg/m ³ *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *Total dust **Respirable fraction
TLV	Long-term value: 1* mg/m ³ as Al; *as respirable fraction

1305-78-8 Calcium oxide

PEL	Long-term value: 5 mg/m ³
REL	Long-term value: 2 mg/m ³
TLV	Long-term value: 2 mg/m ³

14808-60-7 Quartz (SiO₂)

PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *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:** Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.

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· **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:** • Side shields

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Solid
Color: According to product specification

· **Odor:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **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 at 20 °C (68 °F):** 0.8 g/cm³ (6.676 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

Water: Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic: Not applicable.

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Kinematic:	Not applicable.
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Solvent content:	
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Organic solvents:	0.0 %
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Other information	No further relevant information available.
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10 Stability and reactivity

- **Reactivity**
- **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.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Copper(II) chloride dihydrate LD50/oral/rat = 584 mg/kg.
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Contact with eyes may cause irritation.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
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7631-86-9	Silicon dioxide, chemically prepared	3
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14808-60-7	Quartz (SiO ₂)	1
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· NTP (National Toxicology Program)		
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14808-60-7	Quartz (SiO ₂)	K
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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** Harmful to aquatic life with long lasting effects.
- **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.
- **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:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es) · DOT, ADR, ADN, IMDG · Class	Void
· IATA · Class	Void • Not applicable. See note 1 below.
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· 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 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 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 hazardous material. This information is applicable only for the Activated Carbon Product identified in this document.
· UN "Model Regulation":	-

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15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

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

None of the ingredients is listed.

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

1344-28-1 | Aluminum oxide

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

7440-44-0 | Carbon

7631-86-9 | Silicon dioxide, chemically prepared

1344-28-1 | Aluminum oxide

1305-78-8 | Calcium oxide

1313-59-3 | Sodium oxide

14808-60-7 | Quartz (SiO₂)

· **Proposition 65**

· **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)**

1344-28-1 | Aluminum oxide

A4

14808-60-7 | Quartz (SiO₂)

A2

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

14808-60-7 | Quartz (SiO₂)

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

None of the ingredients is listed.

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

· **Hazard pictograms** Void

· **Signal word** Warning

· **Hazard statements**

Causes eye irritation.

· **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Wash thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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If eye irritation persists: Get medical advice/attention.

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

The product is classified and labelled according to Regulation (EC) No. 1272/2008 (GHS/CLP). The product is classified and labelled in accordance with Directive 1999/45/EC.

· **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.

· **Relevant phrases**

GHS Classification -

TAOr4: Acute toxicity, oral, Cat. 4

CSk2: Skin corrosion/irritation, Cat. 2

CEy2: Serious eye damage/eye irritation, Cat. 2

NChr1: Hazardous to the aquatic environment, chronic, Cat. 1

· **Department issuing MSDS:** Product safety department

· **Contact:** Product Safety Department

· **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)

ICAO: International Civil Aviation Organization

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)

USA