

Printing date 12/27/2017 Reviewed on 12/27/2017

### 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<sup>TM</sup> HC Filter; Model 300<sup>TM</sup> HC Filter
- · Part numbers:

202232-4-PC	202232L-SS	202232RL-6-PC	202232-SS-QC	202233L-B-QC	202233RL-SS-QC	202RHCD-B-QC
202232-6-PC	202232L-SS-QC	202232RL-B	202232XL-4-PC	202233L-SS-QC	202233R-SS	202RHCD-SS-QC
202232-B	202232M-V	202232RL-B-QC	202232XL-6-PC	202233L-SS-QC	202233R-SS-QC	202RHCL-B-QC
202232-B-QC	202232R-4-PC	202232RL-SS	202232XL-B	202233M-SS	202233RXL-B	202RHCL-SS-QC
202232D-4-PC	202232R-6-PC	202232RL-SS-QC	202232XL-B-QC	202233M-SS-QC	202233RXL-B-QC	202RHC-SS-QC
202232D-6-PC	202232R-B	202232R-SS	202232XL-SS	202233R-B	202233RXL-SS	202RHCXL-B-QC
202232D-B	202232R-B-QC	202232R-SS-QC	202232XL-SS-QC	202233R-B-QC	202233RXL-SS-QC	202RHCXL-SS-QC
202232D-B-QC	202232RD-4-PC	202232RXL-4-PC	202233-B	202233RD-B	202233-SS	202330-В
202232D-SS	202232RD-6-PC	202232RXL-6-PC	202233-B-QC	202233RD-B-QC	202233-SS-QC	202332-B
202232D-SS-QC	202232RD-B	202232RXL-B	202233D-B	202233RD-SS	202233XL-B	202330-SS
202232L-4-PC	202232RD-B-QC	202232RXL-B-QC	202233D-B-QC	202233RD-SS-QC	202233XL-B-QC	202332-SS
202232L-6-PC	202232RD-SS	202232RXL-SS	202233D-SS-QC	202233RL-B	202233XL-SS	991053
202232L-B	202232RD-SS-QC	202232RXL-SS-QC	202233D-SS-QC	202233RL-B-QC	202233XL-SS-QC	
202232L-B-QC	202232RL-4-PC	202232-SS	202233L-B	202233RL-SS	202RHC-B-QC	

- · **SDS** number: 991053
- · CAS Number:

7440-44-0

• **EC number:** 231-153-3

- 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.

## 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.

(Contd. on page 2)

(Contd. of page 1)

# Safety Data Sheet acc. to OSHA HCS

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure<sup>TM</sup> HC Filter; Model 300<sup>TM</sup> HC Filter

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



Health = 0Fire = 1

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

### 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 ingestion of internal contents occurs, rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration and continue to rinse mouth with water. Seek medical attention immediately.

- 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.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

US

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure™ HC Filter; Model 300™ HC Filter

(Contd. of page 2)

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · 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 No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- 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.

### 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: Wash hands before breaks and at the end of work.
- · 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.

· 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

US.

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure™ HC Filter; Model 300™ HC Filter

(Contd. of page 3)

	(Contd. of p
Physical and chemical proper	rties
Information on basic physical and	
Injormation on basic physical and General Information	cnemical properties
Appearance:	
Form:	Granulate
Color:	Dark
Odor:	Odorless
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	2550.00 (( (22.00)
Melting point/Melting range:	3550 °C (6,422 °F) 4827 °C (8,720.6 °F)
Boiling point/Boiling range:	· · · · · · · · · · · · · · · · · · ·
Flash point:	Not applicable.
Flammability (solid, gaseous):	Flammable.
Ignition temperature:	>220 °C (>428 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density at 20 °C (68 °F):	0.55 g/cm³ (4.6 lbs/gal)
Bulk density at 20 °C (68 °F):	$550 \text{ kg/m}^3$
Relative density	Not determined.
Vapor density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	t <b>er):</b> Not determined.
Viscosity:	Not applicable
Dynamic: Kinematic:	Not applicable. Not applicable.
Organic solvents:	Not applicable. 0.0 %
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.

(Contd. on page 5)

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure<sup>TM</sup> HC Filter; Model 300<sup>TM</sup> HC Filter

(Contd. of page 4)

· 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 eve: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · 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: Generally not hazardous for water
- · 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, ADN, IMDG, IATA

Void

(Contd. on page 6)

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure™ HC Filter; Model 300™ HC Filter

IIN manna shinning nama	(Contd. of page
· 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 MA and the IBC Code	IRPOL73/78 Not applicable.
Transport/Additional information:	Note 1: Under the UN classification for activated carbon, a activated carbons have been identified as a class 4. product. However, this product type or an equivalent had been tested according to the "United Nations Transport of Dangerous Good"s test protocol for a "self-heatin substance" (United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Sectio 33.3.1.6 - Test N.4 - Test Method for Self Heatin Substances) and it has been specifically determined that the product type or an equivalent does not meet the definition of a self heating substance (class 4.2) or any other hazar class, and therefore should not be listed as a DOT hazardou material.
· UN "Model Regulation":	Void

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- ·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 listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

(Contd. on page 7)

Printing date 12/27/2017 Reviewed on 12/27/2017

Trade name: CRS ZPure<sup>TM</sup> HC Filter; Model 300<sup>TM</sup> HC Filter

(Contd. of page 6)

· 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 12/27/2017 / -
- · 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 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

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

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

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.