## SAFETY DATA SHEET


<table>
<thead>
<tr>
<th>Revision date:</th>
<th>Initial date of issue:</th>
<th>SDS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 April 2018</td>
<td>10 December 2008</td>
<td>1096-5a</td>
</tr>
</tbody>
</table>

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

457

1.2. Relevant identified uses of the substance or mixture and uses advised against

Nitrile bound, carbon fiber gasketing material for high temperature applications. It is also good in steam applications.

1.3. Details of the supplier of the safety data sheet

**Company:**
A.W. CHESTERTON COMPANY  
860 Salem Street  
Groveland, MA 01834-1507, USA  
Tel. +1 978-469-6466  
Fax: +1 978-469-6785  
(Mon. - Fri. 8:30 - 5:00 PM EST)  
SDS requests: www.chesterton.com  
E-mail (SDS questions): ProductMSDSs@chesterton.com  
E-mail: customer.service@chesterton.com  

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,  
Unit 105, Burlington, Ontario L7L 4X8 - Tel. 905-335-5055  
EU: Chesterton International GmbH, Am Lenzenfleck 23,  
D85737 Ismaning, Germany – Tel. +49-89-996-5460

**Supplier:**

1.4. Emergency telephone number

24 hours per day, 7 days per week  
Call Infotrac: 1-800-535-5053  
Outside N. America: +1 352-323-3500 (collect)  
NSW Poisons Information Centre (Australia): 13 11 26

### SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture


This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, 29 CFR 1910.1200, WHMIS 2015 and GHS.

2.1.2. Classification according to WHMIS 1988

Not controlled

2.1.3. Australian statement of hazardous nature

Not classified as hazardous according to criteria of Safe Work Australia.

2.1.4. Additional information

None

2.2. Label elements


**Hazard pictograms:**  
Not applicable

**Signal word:**  
None

**Hazard statements:**  
None

**Precautionary statements:**  
None

**Supplemental information:**  
None
2.3. Other hazards
Fibers may cause mechanical irritation to respiratory tract, skin and eyes.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hazardous Ingredients¹</th>
<th>% Wt.</th>
<th>CAS No./ EC No.</th>
<th>REACH Reg. No.</th>
<th>CLP/GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin</td>
<td>20-30</td>
<td>1332-58-7</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>310-194-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>10</td>
<td>112926-00-8</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>231-545-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>&lt; 2</td>
<td>1333-86-4</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>215-609-9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Substance with a workplace exposure limit.

* 1272/2008/EC, GHS, REACH
* WHMIS 2015
* Safe Work Australia

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures
Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Skin contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contact physician if irritation persists.

Ingestion: Not applicable

4.2. Most important symptoms and effects, both acute and delayed
Fibers may cause mechanical irritation to respiratory tract, skin and eyes. Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Carbon dioxide, dry chemical, foam or water

5.2. Special hazards arising from the substance or mixture
Material will burn slowly if ignited, emitting decomposition fumes from rubber binder. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, SOx, NOx, Hydrogen Cyanide and other toxic fumes.

5.3. Advice for firefighters
Recommend Firefighters wear self-contained breathing apparatus.

Flammability Classification: Not applicable

HAZCHEM Emergency Action Code: 1 Z

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Utilize exposure controls and personal protection as specified in Section 8.

6.2. Environmental Precautions
No special requirements.

6.3. Methods and material for containment and cleaning up
Dust shall be HEPA vacuumed or wet swept.
6.4. Reference to other sections
Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding.

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry area.

7.3. Specific end use(s)
No special precautions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Occupational exposure limit values

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>OSHA PEL₁ ppm</th>
<th>mg/m³</th>
<th>ACGIH TLV² ppm</th>
<th>mg/m³</th>
<th>UK WEL³ ppm</th>
<th>mg/m³</th>
<th>AUSTRALIA ES⁴ ppm</th>
<th>mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin (total)</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Kaolin (resp)</td>
<td></td>
<td></td>
<td>(resp)</td>
<td></td>
<td>(resp)</td>
<td></td>
<td>(inhal)</td>
<td></td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>20 mppcf</td>
<td>80/(%SiO₂)</td>
<td>–</td>
<td>10</td>
<td>6</td>
<td>2.4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(inhal)</td>
<td></td>
<td>(inhal)</td>
<td></td>
<td>(inhal)</td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>–</td>
<td>3.5</td>
<td>–</td>
<td>3.5</td>
<td>–</td>
<td>3.5</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STEL: 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

₁ United States Occupational Health & Safety Administration permissible exposure limits
₂ American Conference of Governmental Industrial Hygienists threshold limit values
₃ EH40 Workplace exposure limits, Health & Safety Executive
₄ Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003]

8.2. Exposure controls

8.2.1. Engineering measures
If it is necessary to alter the product such that dust may be generated, use adequate dust extraction or damp down.

8.2.2. Individual protection measures

<table>
<thead>
<tr>
<th>Respiratory protection</th>
<th>Not normally needed. If exposure limit is exceeded, use approved dust respirator (e.g., EN filter type P1/P2).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective gloves:</td>
<td>Not normally needed.</td>
</tr>
<tr>
<td>Eye and face protection</td>
<td>Recommend safety glasses.</td>
</tr>
<tr>
<td>Other:</td>
<td>None</td>
</tr>
</tbody>
</table>

8.2.3. Environmental exposure controls
Refer to sections 6 and 12.
### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>solid</td>
</tr>
<tr>
<td>Colour</td>
<td>black</td>
</tr>
<tr>
<td>Initial boiling point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>not determined</td>
</tr>
<tr>
<td>% Volatile (by volume)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Method</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not applicable</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 300°C (&gt; 572°F)</td>
</tr>
<tr>
<td>Upper/lower flammability</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not determined</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>not applicable</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>slight aromatic odor</td>
</tr>
<tr>
<td>Odour</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure @ 20°C</td>
<td>not applicable</td>
</tr>
<tr>
<td>% Aromatics by weight</td>
<td>not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.6</td>
</tr>
<tr>
<td>Weight per volume</td>
<td>not applicable</td>
</tr>
<tr>
<td>Coefficient (water/oil)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapour density (air=1)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Rate of evaporation (ether=1)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>insoluble</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

9.2. Other information

None

### SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Refer to sections 10.3 and 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid

Temperatures above 450°C (842°F).

10.5. Incompatible materials

Not known

10.6. Hazardous decomposition products

Thermal decomposition may produce Carbon Monoxide, Carbon Dioxide, SOx, NOx, Hydrogen Cyanide and other toxic fumes.

### SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

**Primary route of exposure under normal use:** Inhalation, skin and eye contact. Personnel with pre-existing chronic respiratory disease may be aggravated by exposure.

**Acute effects:** Fibers may cause mechanical irritation to respiratory tract, skin and eyes.

**Chronic effects:** Repeated inhalation of nuisance dust in excess of exposure limits over an extended period of time may result in injury to the lungs.

**Carcinogenicity:** IARC has designated carbon black as possibly carcinogenic to humans (group 2B).

**Aspiration hazard:** Not applicable

**Other information:** None known

### SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

12.1. Toxicity

Not determined

12.2. Persistence and degradability

Kaolin, Silicon dioxide, Carbon black: inorganic substances, exist in nature. Expected to be non-biodegradable.

12.3. Bioaccumulative potential

Not determined
12.4. Mobility in soil
Solid. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9).

12.5. Results of PBT and vPvB assessment
Not available

12.6. Other adverse effects
None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Unused product is not a regulated waste. Check local, state and national/federal regulations and comply with the most stringent requirement.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number
ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.2. UN proper shipping name
ADR/RID/ADN/IMDG/ICAO: NON-HAZARDOUS, NON REGULATED
TDG: NON-HAZARDOUS, NON REGULATED
US DOT: NON-HAZARDOUS, NON REGULATED

14.3. Transport hazard class(es)
ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.4. Packing group
ADR/RID/ADN/IMDG/ICAO: NOT APPLICABLE
TDG: NOT APPLICABLE
US DOT: NOT APPLICABLE

14.5. Environmental hazards
NOT APPLICABLE

14.6. Special precautions for user
NOT APPLICABLE

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
NOT APPLICABLE

14.8. Other information
NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU regulations
Authorisations under Title VII: Not applicable
Restrictions under Title VIII: None
Other EU regulations: None

15.1.2. National regulations

US EPA SARA TITLE III

312 Hazards: 313 Chemicals:
Immediate: None
Delayed: None

Other national regulations: None

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
### Abbreviations and acronyms:
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE: Acute Toxicity Estimate
- BCF: Bioconcentration Factor
- cATpE: Converted Acute Toxicity point Estimate
- CLP: Classification Labelling Packaging Regulation (1272/2008/EC)
- ES: Exposure Standard
- GHS: Globally Harmonized System
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods
- LC50: Lethal Concentration to 50 % of a test population
- LD50: Lethal Dose to 50% of a test population
- LOEL: Lowest Observed Effect Level
- N/A: Not Applicable
- NA: Not Available
- NOEC: No Observed Effect Concentration
- NOEL: No Observed Effect Level
- OECD: Organization for Economic Co-operation and Development
- PBT: Persistent, Bioaccumulative and Toxic substance
- (Q)SAR: Quantitative Structure-Activity Relationship
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)
- REL: Recommended Exposure Limit
- RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
- SDS: Safety Data Sheet
- STEL: Short Term Exposure Limit
- STOT RE: Specific Target Organ Toxicity, Repeated Exposure
- STOT SE: Specific Target Organ Toxicity, Single Exposure
- TDG: Transportation of Dangerous Goods (Canada)
- TWA: Time Weighted Average
- US DOT: United States Department of Transportation
- vPvB: very Persistent and very Bioaccumulative substance
- WEL: Workplace Exposure Limit
- WHMIS: Workplace Hazardous Materials Information System

### Key literature references and sources for data:
- Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
- Chemical Classification and Information Database (CCID)
- European Chemicals Agency (ECHA) - Information on Chemicals
- Hazardous Chemical Information System (HCIS)
- National Institute of Technology and Evaluation (NITE)
- Swedish Chemicals Agency (KEMI)
- U.S. National Library of Medicine Toxicology Data Network (TOXNET)

### Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP] / GHS:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Relevant H-statements:
- None

### Hazard pictogram names:
- Not applicable

### Changes to the SDS in this revision:
- Section 1.3.

### Revision date:
- 26 April 2018

### Further information:
- None

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.