SAFETY DATA SHEET


Revision date: 3 August 2018
Initial date of issue: 21 January 2009
SDS No. 1090I-8

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

1.1. Product identifier
CMS 2000 Injectable Sealing Compound

1.2. Relevant identified uses of the substance or mixture and uses advised against
This new asbestos-free sealing product from Chesterton® is a high quality pump sealant which offers virtually zero leakage. It is an excellent replacement sealant on pumps with worn or pitted shafts since its malleability allows it to conform to all irregularities on shaft and stuffing box.

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. +1 978-469-6446    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. Australian statement of hazardous nature
Not classified as hazardous according to criteria of Safe Work Australia.

2.1.3. Additional information
Because this product has a special shape, surface, or design which determines its function to a greater degree than does its chemical composition, this product is an article and does not require registration according to Regulation (EC) No 1907/2006 [REACH]. This product is also an article for purposes of OSHA and WHMIS because: 1) it is formed to a specific shape or design during manufacture; 2) it has an end use function dependent in whole or in part upon its shape or design during end use; and 3) it does not release or otherwise result in exposure to a hazardous chemical under normal conditions of use.

2.2. Label elements


Hazard pictograms: None
Signal word: None
Hazard statements: None
Precautionary statements: None
Supplemental information: None

2.3. Other hazards
PTFE is nonhazardous at ambient temperatures. At temperatures above 260°C (500°F), toxic decomposition products may be emitted. Due to toxic decomposition, avoid smoking (wash hands to avoid transfer to tobacco products) when handling.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>Hazardous Ingredients¹</th>
<th>% Wt.</th>
<th>CAS No.</th>
<th>REACH Reg. No.</th>
<th>CLP/GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other ingredients:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite</td>
<td>25-35</td>
<td>7782-42-5</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>231-955-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talc</td>
<td>5-10</td>
<td>14807-96-6</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>239-677-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatty acids, tallow, Me esters, chlorinated</td>
<td>5-10</td>
<td>68440-29-9</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>270-448-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White mineral oil (petroleum)</td>
<td>1-5</td>
<td>8042-47-5</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>232-455-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>1-3</td>
<td>13463-67-7</td>
<td>NA</td>
<td>Not classified*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>236-675-5</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: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Ingestion: Do not induce vomiting. If conscious, dilute stomach contents with large quantities of milk or water. Contact physician immediately.

Protection of first-aiders: No special precautions.

4.2. Most important symptoms and effects, both acute and delayed

Mild transient skin and eye irritant.

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

Treat symptoms.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide, dry chemical, foam, water fog

Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

Thermal decomposition may produce Carbon Monoxide, Carbon Dioxide, aldehydes and other toxic fumes.

5.3. Advice for firefighters

Recommend Firefighters wear self-contained breathing apparatus. Thermal decomposition can form Hydrogen Chloride and other toxic fumes.

Flammability Classification: –

HAZCHEM Emergency Action Code: 2 Z
SECTION 6: ACCIDENTAL RELEASE MEASURES

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

6.2. Environmental Precautions
Keep out of sewers, streams and waterways.

6.3. Methods and material for containment and cleaning up
Scoop up and transfer to a suitable container for disposal.

6.4. Reference to other sections
Refer to section 13 for disposal advice.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Remove contaminated clothing and wash before reuse. Avoid contamination of tobacco products. Wash before eating, drinking or smoking.

7.2. Conditions for safe storage, including any incompatibilities
Keep container closed when not in use. 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>ACGIH TLV² ppm</th>
<th>UK WEL³ ppm</th>
<th>AUSTRALIA ES⁴ ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite</td>
<td>15 mppcf</td>
<td>(resp.)</td>
<td>2 (resp.)</td>
<td>4 (resp.)</td>
</tr>
<tr>
<td>Talc</td>
<td>20 mppcf</td>
<td>(resp.)</td>
<td>2 (resp.)</td>
<td>1 (resp.)</td>
</tr>
<tr>
<td>Fatty acids, tallow, Me esters, chlorinated</td>
<td>–</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>White mineral oil (petroleum)</td>
<td>(mist) 5</td>
<td>(mist) 5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>(resp.) 5</td>
<td>–</td>
<td>10 (resp.)</td>
<td>4 (resp.)</td>
</tr>
<tr>
<td>(total)</td>
<td>15</td>
<td>–</td>
<td>10 (total)</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]

Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:

Workers
Not available

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:
Not available

8.2. Exposure controls

8.2.1. Engineering measures
No special requirements. If using under extreme heat, use local exhaust.

8.2.2. Individual protection measures

Respiratory protection: Not normally needed.

Protective gloves: Impervious gloves. Cotton gloves have been recommended.
Eye and face protection: Safety glasses
Other: Do not smoke while using the product.

8.2.3. Environmental exposure controls
No special requirements. 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>putty, thick compound mix</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 applicable</td>
</tr>
<tr>
<td>% Volatile (by volume)</td>
<td>none</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 determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt; 300°C (&gt; 572°C)</td>
</tr>
<tr>
<td>Upper/lower flammability</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>not determined</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

10.3. Possibility of hazardous reactions
No dangerous reactions known under conditions of normal use.

10.4. Conditions to avoid
Extreme heat above 260°C (500°F).

10.5. Incompatible materials
Some strong acids/bases and strong oxidizers like liquid Chlorine and concentrated Oxygen.

10.6. Hazardous decomposition products
Carbon Monoxide, aldehydes, acids 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.

Acute toxicity -

Oral:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite</td>
<td>LD50, rat (OECD 423)</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>Fatty acids, tallow, Me esters, chlorinated</td>
<td>LD50, rat, calculated</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Dermal:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, tallow, Me esters, chlorinated</td>
<td>LD50, rat, calculated</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>
Inhalation:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite</td>
<td>LC50, rat, 4 hours (OECD 403)</td>
<td>&gt; 2 mg/l (dust)</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>LC50, rat, 4 hours</td>
<td>&gt; 6.82 mg/l (dust)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Mild transient skin irritant.

Serious eye damage/irritation: Mild transient eye irritant.

Respiratory or skin sensitisation:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphite</td>
<td>Skin sensitization (OECD 429)</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

Germ cell mutagenicity: Graphite: based on available data, the classification criteria are not met.

Carcinogenicity: The International Agency for Research on Cancer (IARC) has designated inhaled titanium dioxide as possibly carcinogenic to humans (group 2B).

Reproductive toxicity: Graphite: based on available data, the classification criteria are not met.

STOT – single exposure: Graphite: based on available data, the classification criteria are not met.

STOT – repeated exposure: Graphite: based on available data, the classification criteria are not met. Repeated or prolonged inhalation of Talc dust may cause chronic cough, shortness of breath, scarring of the lungs (pulmonary fibrosis) and mild symptomatic pneumoconiosis.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: None

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
Graphite: LC50/EC50/ErC50 > 100 mg/l in the most sensitive species.

12.2. Persistence and degradability
Graphite, Talc, Titanium dioxide: inorganic substances, exist in nature. Fatty acids, tallow, Me esters, chlorinated: biodegradable (not readily biodegradable.).

12.3. Bioaccumulative potential
Graphite: bioconcentration in aquatic organisms is not expected to be significant.

12.4. Mobility in soil
Semi-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
No information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Landfill material with a properly licensed facility. Material may be incinerated at an appropriate facility with emissions controls. 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
### 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

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### 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:** None  
- **313 Chemicals:** 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.
SECTION 16: OTHER INFORMATION

### 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)
- RETL: 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

Other abbreviations and acronyms can be looked up at www.wikipedia.org.

### 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>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Relevant H-statements:
Not applicable

### Hazard pictogram names:
None

### Changes to the SDS in this revision:
Sections 11, 12.4.

### Date of last revision:
3 August 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.