SAFETY DATA SHEET

1. Identification

Product identifier: Oatey Great White Pipe Joint Compound

Other means of identification
- SDS number: 1701E
- Synonyms: Pipe Joint Compound for Threaded Metal Pipes
- Part Numbers: 31229, 31230, 31231, 31232, 31233, 48007, 48008, 48009, 48321, 48322

Recommended use: None known.

Recommended restrictions: None known.

Company Name: Oatey Co.
Address: 4700 West 160th St.
Cleveland, OH 44135
Telephone: 216-267-7100
E-mail: info@oatey.com
Transport Emergency: Chemtrec 1-800-424-9300 (Outside the US 1-703-527-3887)
Emergency First Aid: 1-877-740-5015
Contact person: MSDS Coordinator

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Health hazards not otherwise classified
Environmental hazards: Not classified.

Signal word: Danger
Hazard statement: Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever.

Precautionary statement
- Prevention: Observe good industrial hygiene practices.
- Response: Wash hands after handling.
- Storage: Store away from incompatible materials.
- Disposal: Dispose of waste and residues in accordance with local authority requirements.

Other hazards: None known.
Supplemental information: None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate</td>
<td>1317-65-3</td>
<td>30-50</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>30-40</td>
</tr>
<tr>
<td>Polyfluoroethylene</td>
<td>9002-84-0</td>
<td>5-15</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>5-10</td>
</tr>
</tbody>
</table>
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Coughing.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
No unusual fire or explosion hazards noted.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation.

**Methods and materials for containment and cleaning up**
The product is immiscible with water and will sediment in water systems.

**Large Spills**
Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

**Small Spills**
Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Never return spills to original containers for re-use.**
For waste disposal, see section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

**Precautions for safe handling**
Avoid contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

### 8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values
### US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m3</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Mist.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>STEL</td>
<td>20 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.025 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.025 mg/m3</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m3</td>
<td>Respirable.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium carbonate (CAS 1317-65-3)</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>Total dust.</td>
</tr>
<tr>
<td>Crystalline silica (Quartz) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m3</td>
<td>Respirable dust.</td>
</tr>
</tbody>
</table>
Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

**Biological limit values**
No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection**
Wear appropriate chemical resistant gloves.

**Other**
Wear suitable protective clothing.

**Respiratory protection**
In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

**Physical state**
Liquid.

**Form**
Liquid paste.

**Color**
White.

**Odor**
Odorless

**Odor threshold**
Not available.

**pH**
Not available.

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
> 212.0 °F (> 100.0 °C)

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)**
Not available.

**Flammability limit - upper (%)**
Not available.

**Explosive limit - lower (%)**
Not available.

**Explosive limit - upper (%)**
Not available.

**Vapor pressure**
Not available.

**Vapor density**
< 1

**Relative density**
1.7

**Solubility(ies)**

**Solubility (water)**
Insoluble

**Partition coefficient (n-octanol/water)**
Not available.

**Auto-ignition temperature**
Not available.
Decomposition temperature  Not available.
Viscosity  25000 cP
Other information
   Explosive properties  Not explosive.
   Oxidizing properties  Not oxidizing.
   VOC (Weight %)  3 g/l

10. Stability and reactivity

Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Material is stable under normal conditions. Material is stable under normal conditions.
Possibility of hazardous reactions  No dangerous reaction known under conditions of normal use.
Conditions to avoid  Contact with incompatible materials.
Incompatible materials  Acids. Fluorine.
Hazardous decomposition products  No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

   Inhalation  Prolonged inhalation may be harmful.
   Skin contact  No adverse effects due to skin contact are expected.
   Eye contact  Direct contact with eyes may cause temporary irritation.
   Ingestion  Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

   Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
   Coughing.

Information on toxicological effects

   Acute toxicity  Not expected to be acutely toxic.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50 Rat</td>
<td></td>
<td>3.43 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral LD50 Rat</td>
<td></td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

   Skin corrosion/irritation  Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
   Serious eye damage/eye irritation  Direct contact with eyes may cause temporary irritation.

   Respiratory or skin sensitization

   Canada - Alberta OELs: Irritant
   Calcium carbonate (CAS 1317-65-3)  Irritant
   Titanium dioxide (CAS 13463-67-7)  Irritant

   Respiratory sensitization  Not a respiratory sensitizer.
   Skin sensitization  This product is not expected to cause skin sensitization.
   Germ cell mutagenicity  No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
   Carcinogenicity  In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)
ACGIH Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7) A2 Suspected human carcinogen.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) A4 Not classifiable as a human carcinogen.
Titanium dioxide (CAS 13463-67-7) A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

Crystalline silica (Quartz) (CAS 14808-60-7) Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, POORLY AND MILDLY REFINED (CAS 64742-52-5) Suspected human carcinogen.
MINERAL OIL, EXCLUDING METAL WORKING FLUIDS, PURE, HIGHLY AND SEVERELY REFINED, INHALABLE FRACTION (CAS 64742-52-5) Not classifiable as a human carcinogen.
SILICA, CRYSTALLINE-.ALPHA.-QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7) Suspected human carcinogen.
TITANIUM DIOXIDE (CAS 13463-67-7) Not classifiable as a human carcinogen.

Canada - Quebec OELs: Carcinogen category

Crystalline silica (Quartz) (CAS 14808-60-7) Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.
Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5) 3 Not classifiable as to carcinogenicity to humans.
Polyfluoroethylene (CAS 9002-84-0) 3 Not classifiable as to carcinogenicity to humans.
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG
Not regulated as dangerous goods.
IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to  Annex II of MARPOL 73/78 and the IBC Code
Not established.

15. Regulatory information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act
Not regulated.

Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

International regulations

Stockholm Convention
Not applicable.

Rotterdam Convention
Not applicable.

Kyoto protocol
Not applicable.

Montreal Protocol
Not applicable.

Basel Convention
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date: 10-December-2015
Revision date: 24-May-2016
Version #: 02
List of abbreviations

IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
TWA: Time weighted average.
LD50: Lethal dose 50% (dose that kills 50% of test animals).
LC50: Lethal concentration 50% (concentration that kills 50% of test animals).

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

Oatey Co. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.