# SAFETY DATA SHEET

## 1. Product and Company Identification

| | |
|---|---|
| **Material name** | VOLCLAY® API GEL NT |
| **Version #** | 02 |
| **Revision date** | 18-November-2015 |
| **CAS #** | 1302-78-9 |
| **Synonym(s)** | SMECTITE CLAY |
| **Company** | American Colloid Company<br>Petroleum Products Group<br>2870 Forbs Avenue<br>Hoffman Estates, IL 60192 US<br>safetydata@amcol.com<br>http://www.colloid.com/PPG/<br>General Information (800) 426-5564<br>CHEMTREC® (800) 424-9300 |

## 2. Hazards Identification

**Potential health effects**

| | |
|---|---|
| **Routes of exposure** | Inhalation. Eye contact. |
| **Eyes** | Dust or powder may irritate eye tissue. Symptoms include itching, burning, redness and tearing. |
| **Skin** | Non-irritating to the skin. Not expected to be a primary skin irritant. |
| **Inhalation** | Inhalation of dusts may cause respiratory irritation. Repeated or prolonged inhalation may cause toxic effects. For additional information on inhalation hazards, see Section 11 of this safety data sheet. |
| **Ingestion** | No significant adverse effects are expected upon ingestion of the product. |
| **Target organs** | Lungs. |
| **Chronic effects** | This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumocononiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. |

## 3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

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|---|---|
| **Composition comments** | Bentonite contains naturally occurring crystalline silica (not listed in Annex I of Directive 67/548/EEC) in quantities less than 6%. Occupational Exposure Limits for impurities are listed in Section 8. |

## 4. First Aid Measures

**First aid procedures**

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|---|---|
| **Eye contact** | Flush eyes immediately with large amounts of water. Get medical attention if irritation develops or persists. |
| **Skin contact** | No special measures required. Get medical attention if irritation develops or persists. |
| **Inhalation** | If symptoms are experienced, remove source of contamination or move victim to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms persist. |
| **Ingestion** | No special measures required. If ingestion of a large amount does occur, seek medical attention. |
| **Notes to physician** | Provide general supportive measures and treat symptomatically. |
| **General advice** | If you feel unwell, seek medical advice (show the label where possible). |

## 5. Fire Fighting Measures

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| **Flammable properties** | The product is not flammable. This material will not burn. |

**Extinguishing media**

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|---|---|
| **Suitable extinguishing media** | Dry chemical, CO2, water spray or regular foam. Use any media suitable for the surrounding fires. |

**Protection of firefighters**

**Protective equipment and precautions for firefighters** Material can be slippery when wet.

**Hazardous combustion products** None known.

## 6. Accidental Release Measures

**Personal precautions** Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk. Wear a dust mask if dust is generated above exposure limits.

**Environmental precautions** No special environmental precautions required.

**Methods for containment** None necessary.

**Methods for cleaning up** Avoid the generation of dusts during clean-up. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Reduce airborne dust and prevent scattering by moistening with water.

## 7. Handling and Storage

**Handling** Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk.

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage** Guard against dust accumulation of this material. No special storage conditions required. No special restrictions on storage with other products.

## 8. Exposure Controls / Personal Protection

**Occupational exposure limits**

**ACGIH**

| Impurities | Type | Value | Form |
|---|---|---|---|
| INERT OR NUISANCE DUST (SEQ250) | TWA | 10 mg/m3 | Inhalable particles. |
| | | 3 mg/m3 | Respirable particles. |
| QUARTZ (14808-60-7) | TWA | 0.025 mg/m3 | Respirable fraction. |

**U.S. - OSHA**

| Impurities | Type | Value | Form |
|---|---|---|---|
| INERT OR NUISANCE DUST (SEQ250) | PEL | 15 mg/m3 | Total dust. |
| | | 5 mg/m3 | Respirable fraction. |
| | TWA | 5 mg/m3 | Respirable fraction. |
| | | 50 mppcf | Total dust. |
| | | 15 mppcf | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| QUARTZ (14808-60-7) | TWA | 2.4 mppcf | Respirable. |
| | | 0.3 mg/m3 | Total dust. |
| | | 0.1 mg/m3 | Respirable. |
| | | 0.1 mg/m3 | Respirable dust. |

**Exposure guidelines** Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

**Engineering controls** If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.

**Personal protective equipment**

**Eye / face protection** Wear dust goggles.

**Skin protection** No special protective equipment required.

**Respiratory protection** Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

**General hygiene considerations** Eye wash fountain is recommended. Use good industrial hygiene practices in handling this material.

## 9. Physical & Chemical Properties

**Appearance** Not available.

| | |
|---|---|
| **Color** | Various. |
| **Odor** | None. |
| **Odor threshold** | Not available. |
| **Physical state** | Solid. |
| **Form** | Powder. |
| **pH** | 8 - 11 |
| **Melting point** | Not available. |
| **Freezing point** | Not available. |
| **Boiling point** | Not available. |
| **Flash point** | Not flammable |
| **Evaporation rate** | Not available. |
| **Flammability** | Not available. |
| **Flammability limits in air, upper, % by volume** | Not explosive |
| **Flammability limits in air, lower, % by volume** | Not explosive |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Specific gravity** | Not available. |
| **Relative density** | Not available. |
| **Solubility (water)** | Negligible |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Molecular formula** | UNKNOWN |

## 10. Chemical Stability & Reactivity Information

| | |
|---|---|
| **Chemical stability** | Stable at normal conditions. |
| **Conditions to avoid** | None known. |
| **Incompatible materials** | None known. |
| **Hazardous decomposition products** | None known. |
| **Possibility of hazardous reactions** | Will not occur. |

## 11. Toxicological Information

**Acute effects**

Mild irritant to eyes (according to the modified Kay & Calandra criteria).

**Chronic effects**

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.)

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)

According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

**Carcinogenicity**

**IARC Monographs: Overall evaluation**

| | |
|---|---|
| QUARTZ (14808-60-7) | 1 Carcinogenic to humans. |

**US ACGIH Threshold Limit Values: A2 carcinogen**

| | |
|---|---|
| QUARTZ (14808-60-7) | A2 Suspected human carcinogen. |

**US NTP Report on Carcinogens: Known carcinogen**

| | |
|---|---|
| QUARTZ (14808-60-7) | Known carcinogen. |

## 12. Ecological Information

**Ecotoxicological data**

| Product | Test Results |
|---|---|
| VOLCLAY® API GEL NT (1302-78-9) | LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss): 19000 mg/l 96.00 Hours |

**Ecotoxicity** This product has no known eco-toxicological effects. This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

**Environmental effects** Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.

**Persistence and degradability** Not available.

## 13. Disposal Considerations

**Disposal instructions** Dispose in accordance with all applicable regulations. Material should be recycled if possible.

## 14. Transport Information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

## 15. Regulatory Information

**US federal regulations** OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Food and Drug Administration (FDA)** Total food additive
Direct food additive
GRAS food additive

**Inventory status**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of New and Existing Chemicals (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

QUARTZ (14808-60-7) Listed.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

QUARTZ (14808-60-7) Listed: October 1, 1988 Carcinogenic.

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

QUARTZ (14808-60-7) Listed.

## 16. Other Information

**Further information** This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

**Recommended restrictions** Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

**HMIS ratings**


**NFPA ratings** Health: 1
Flammability: 0
Instability: 0

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

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**Issue date** 18-November-2009

**Other information** American Colloid Company is an AMCOL International company.