SAFETY DATA SHEET



1. Identification

Product identifier SUPER GEL-X®

Other means of identification None.

Recommended use Not available.

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.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CETCO, an MTI Company Address 2870 Forbs Avenue

Hoffman Estates, IL 60192

United States

Telephone General Information 800 527-9948

Website http://www.cetco.com/
E-mail safetydata@amcol.com

Emergency phone number

Americas 1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962 Access Code 333562

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement Not applicable.

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.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|--------------|----------|
| Bentonite Extender | | Proprietary* | < 0.1 |
| Other components below reportable levels | 3 | | 90 - 100 |
| Constituents | | | |
| Chemical name | | CAS number | % |
| CALCIUM CARBONATE | | 471-34-1 | |
| SMECTITE GROUP MINERALS/BENTON | IITE | 1302-78-9 | |

Material name: SUPER GEL-X®

Constituents

| Chemical name | CAS number | % |
|---------------|------------|------|
| QUARTZ | 14808-60-7 | <= 8 |
| CRISTOBALITE | 14464-46-1 | <= 2 |

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret. Bentonite is a UVCB substance sub-type 4. The purity of the product is 100 % w/w. Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

Composition comments

Occupational Exposure Limits for constituents are listed in Section 8. The purity of the product is 100% w/w. Impurities are not applicable for a UVCB substance.

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a

physician if symptoms develop or persist. No specific first aid measures noted.

Skin contact No specific first aid measures noted. Get medical attention if irritation develops and persists. Wash

skin with soap and water.

Eve contact No specific first aid measures noted.

No specific first aid measures noted. Rinse mouth thoroughly. Get medical attention if any Ingestion

discomfort occurs.

Most important

symptoms/effects, acute and

delayed

Dust in the eyes will cause irritation.

Indication of immediate medical attention and special

treatment needed

Provide general supportive measures and treat symptomatically.

General information No hazards which require special first aid measures. Provide general supportive measures and

treat symptomatically.

5. Fire-fighting measures

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Use any media suitable for the Suitable extinguishing media

surrounding fires.

Unsuitable extinguishing

media

Not applicable, non-combustible.

Specific hazards arising from

the chemical

None known. The product itself does not burn.

Special protective equipment and precautions for firefighters Material can be slippery when wet.

Fire fighting

equipment/instructions

In the event of fire, cool tanks with water spray. Material can be slippery when wet.

Specific methods Cool containers exposed to flames with water until well after the fire is out. General fire hazards No unusual fire or explosion hazards noted. This material will not burn.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Material can be slippery when wet. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Avoid inhalation of dust from the spilled material. For personal protection, see section 8 of the SDS. No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

Methods and materials for containment and cleaning up If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Practice good housekeeping.

Material name: SUPER GEL-X® SDS US Conditions for safe storage, including any incompatibilities

No special restrictions on storage with other products. Store in a dry area. Store in original tightly closed container. Keep the container dry. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Guard against dust accumulation of this material.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Constituents | Туре | Value | Form |
|-------------------------------------|---------|----------|----------------------|
| INERT OR NUISANCE DUSTS | PEL | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| US. OSHA Table Z-3 (29 CFR 1910.100 | 0) | | |
| Constituents | Туре | Value | Form |
| INERT OR NUISANCE DUSTS | TWA | 5 mg/m3 | Respirable fraction. |
| | | 15 mg/m3 | Total dust. |
| | | 50 mppcf | Total dust. |
| | | 15 mppcf | Respirable fraction. |
| US. ACGIH Threshold Limit Values | | | |
| Components | Туре | Value | |
| TRADE SECRET | TWA | 2 ppm | |
| US. NIOSH: Pocket Guide to Chemical | Hazards | | |
| Components | Туре | Value | |
| TRADE SECRET | TWA | 6 mg/m3 | |
| | | 2 ppm | |

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

Exposure guidelines

US - California OELs: Skin designation

TRADE SECRET (CAS Proprietary)

Can be absorbed through the skin.

US - Tennessee OELs: Skin designation

TRADE SECRET (CAS Proprietary)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

TRADE SECRET (CAS Proprietary)

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

TRADE SECRET (CAS Proprietary)

Can be absorbed through the skin.

Appropriate engineering

controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory

protection must be worn.

Individual protection measures, such as personal protective equipment

danger of eye contact.

Skin protection

Hand protection No protection is ordinarily required under normal conditions of use.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

exceeding the exposure limits.

Thermal hazards Not applicable.

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. Use good industrial hygiene practices in handling this

material.

9. Physical and chemical properties

Appearance Lump, granular or fine powder.

Physical state Solid.

Material name: SUPER GEL-X®

4786 Version #: 20 Revision date: 24-July-2015 Print date: 24-July-2015

SDS US

Form Powder, Various.

Various. Color Odor None.

Odor threshold Not applicable.

8.5 - 11 pН

> 842 °F (> 450 °C) / Not applicable. Melting point/freezing point

Initial boiling point and boiling

range

Not applicable.

Not applicable.

Flash point **Evaporation rate** Not available.

This product is not flammable. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

Not applicable.

(%)

Flammability limit - upper

Not applicable.

Not applicable.

(%)

Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%) Vapor pressure Not applicable. Not applicable. Vapor density 2.6 g/cm3 Relative density

Solubility(ies)

< 0.9 mg/l Solubility (water) **Partition coefficient** Not applicable. Not applicable. (n-octanol/water) **Auto-ignition temperature** Not applicable. > 932 °F (> 500 °C) **Decomposition temperature** Not applicable. **Viscosity**

Other information

Viscosity temperature

0.9 - 1.4 g/cm³ **Bulk density Explosive limit** Not applicable. Not explosive **Explosive properties Explosivity** Not applicable. Flame extension Not applicable. **Flammability** Not applicable. Flammability (flash back) Not applicable. Flammability (Heat of Not applicable.

combustion)

Not applicable. Flammability (Train fire) Flammability class Not applicable. Not flammable Flash point class Molecular formula **UVCB** Substance Not applicable. Molecular weight

Oxidizing properties None. 0 % Percent volatile 8.5 - 11pH in aqueous solution

Specific gravity Not applicable.

VOC (Weight %) **CARB**

0 %

Material name: SUPER GEL-X® 4786 Version #: 20 Revision date: 24-July-2015 Print date: 24-July-2015

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Will not occur.

Conditions to avoid Moisture. Avoid temperatures exceeding the decomposition temperature. Contact with

incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with

Test Results

compressed air).

Incompatible materials None known.

Hazardous decomposition

products

Product

None.

11. Toxicological information

Information on likely routes of exposure

Inhalation Inhalation of dusts may cause respiratory irritation.

Skin contact Not classified.

Eye contact Dust in the eyes will cause irritation.

Species

IngestionNot classified.Symptoms related to theNone known.

physical, chemical and toxicological characteristics

Information on toxicological effects

| Product | Species | rest Results |
|--------------|---------|----------------------------|
| Bentonite | | |
| <u>Acute</u> | | |
| Inhalation | | |
| Dust | | |
| LC50 | Rat | > 5.27 mg/l, 4 hr OECD 436 |
| Oral | | |
| Dust | | |
| LD50 | Rat | > 2000 mg/kg OECD 425 |
| Components | Species | Test Results |
| TRADE SECRET | | |
| <u>Acute</u> | | |
| Inhalation | | |
| LC50 | Rat | 10600 mg/l/4h |
| | | 1200 mg/l, 4 Hours |
| Oral | | |
| LD50 | Mouse | 2400 mg/kg |
| | Rat | 33.5 mg/kg |
| | | 5 5 |

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Not classified.

Serious eye damage/eye Dust in the eyes will cause irritation. Mild irritant to eyes (according to the modified Kay & Calandra

irritation criteria)

Respiratory or skin sensitization

Respiratory sensitization Not classified.
Skin sensitization Not classified.
Germ cell mutagenicity Not classified.

Material name: SUPER GEL-X®

Carcinogenicity

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 respirable dust and respirable crystalline silica should be monitored and controlled. No carcinogenicity data available for this product. Sepiolite was evaluated by IARC as class 3 ("Cannot be classified as to carcinogenicity to humans"). Based on read-across with sepiolite, bentonite was assessed as non-carcinogenic. Therefore classification of bentonite for carcinogenicity is not warranted.

IARC Monographs. Overall Evaluation of Carcinogenicity

TRADE SECRET (CAS Proprietary) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Specific target organ toxicity - Not classified. Not classified.

single exposure

Specific target organ toxicity -

Not classified.

repeated exposure **Aspiration hazard**

Not available.

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.

| | Species | Test Results |
|------|--|--|
| | | |
| | | |
| EC50 | Freshwater algae | > 100 mg/l, 72 hours |
| EC50 | Coon stripe shrimp (Pandalus danae) | 24.8 mg/l, 96 hours |
| | Daphnia | > 100 mg/l, 48 hours |
| | Dungeness or edible crab (Cancer magister) | 81.6 mg/l, 96 hours |
| LC50 | Freshwater fish | 16000 mg/l, 96 hours |
| | Marine water fish | 2800 - 3200 mg/l, 24 hours |
| | Species | Test Results |
| | | |
| | | |
| EC50 | Daphnia | 47 mg/L, 48 Hours |
| LC50 | Fish | 222 mg/L, 96 Hours |
| | LC50 EC50 | EC50 Freshwater algae EC50 Coon stripe shrimp (Pandalus danae) Daphnia Dungeness or edible crab (Cancer magister) LC50 Freshwater fish Marine water fish Species EC50 Daphnia |

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability Not relevant for inorganic substances

Bioaccumulative potential Will not bio-accumulate. Partition coefficient n-octanol / water (log Kow)

TRADE SECRET 0.35

Mobility in soil Bentonite is almost insoluble and thus presents a low mobility in most soils.

Mobility in general The product has poor water-solubility.

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 in

accordance with all applicable 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.

Material name: SUPER GEL-X®

SDS US

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

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Store containers and offer for recycling of material when in accordance with the local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to

Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

TRADE SECRET (CAS Proprietary)

Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

TRADE SECRET (CAS Proprietary)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

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

GRAS food additive

US state regulations

US - New Jersey RTK - Substances: Listed substance

TRADE SECRET (CAS Proprietary)

US - Pennsylvania RTK - Hazardous Substances: Listed substance

TRADE SECRET (CAS Proprietary)

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

TRADE SECRET (CAS Proprietary)

US. Massachusetts RTK - Substance List

TRADE SECRET (CAS Proprietary)

Material name: SUPER GEL-X® sps.us

US. New Jersey Worker and Community Right-to-Know Act

TRADE SECRET (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

TRADE SECRET (CAS Proprietary)

US. Rhode Island RTK

TRADE SECRET (CAS Proprietary)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region

| 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 Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances | Yes |

(PICCS)

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

Toxic Substances Control Act (TSCA) Inventory

16. Other information, including date of preparation or last revision

Inventory name

Issue date10-October-2013Revision date24-July-2015

Version # 20

United States & Puerto Rico

Further information This safety datasheet only contains information relating to safety and does not replace any product

information or product specification.

UVCB = a substance of Unknown or Variable composition, Complex reaction products or

Biological materials

SWERF = Size Weighted Respirable Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product. All details about the SWERF

method are available at www.crystallinesilica.eu.

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1

Flammability: 0 Physical hazard: 0

NFPA ratings Health: 1

Flammability: 0 Instability: 0

List of abbreviations

SWERF = Size-Weighted Relevant Fine Fraction methodology is a scientific method developed to quantify the content of respirable particles within a bulk product. All details about the SWERF

method are available at www.crystallinesilica.eu.

UVCB = a substance of Unknown or Variable composition, Complex reaction products or

Biological materials

References For any information on literature references or toxicity/ecotoxicity studies, please contact the

supplier.

Material name: SUPER GEL-X®

On inventory (yes/no)*

Yes

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).

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. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information

This document has undergone significant changes and should be reviewed in its entirety.

Material name: SUPER GEL-X®