

GHS SDS

Gilsonite®

SDS Version No. 1

Revision Date: 08/28/2013

1. CHEMICAL PRODUCT AND COMPANY INDENTIFICATION

Trade Name:

Gilsonite®, Uintaite, Asphaltene

Chemical Family:

Naturally Occurring Hydrocarbon

Product Uses:

Drilling fluid additive, cement additive, printing ink, foundry, and asphalt

Restrictions on use:

N/A

Supplied by:

American Gilsonite® Company

29950 South Bonanza Highway

Bonanza, UT 84008

Telephone Number:

+1 (435) 789-1921

Emergency Telephone (24 hr.): +1 (435) 790-3863

DISTRIBUTED BY

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Prepared by:

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Revision No.

1

HMIS Rating

Health: 0

Flammability: 1

Physical Hazard: 0

PPE: E

4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. E=Safety Glasses, Gloves, and Dust Respirator. See Section 8 for Personal Protective Equipment recommendations.

2. HAZARDS IDENTIFICATION

GHS Classification:

NA

Emergency Overview:

May cause eye, skin, and respiratory tract irritation. On repeated exposure, may cause skin sensitization or an allergic reaction. Gilsonite® may form combustible dust concentrations in air. Keep away from ignition source and do not let dust accumulate.

| Hazard | Hazard Category | Signal Word | Hazard Statement | Response | Prevention |
|--------------|--------------------|----------------|--|--|---|
| Toxicity | NA | NA | See Section 11 | - See Section 11 | - See Section 11 |
| Skin Contact | 3 | Warning | Mild Irritant: May cause skin sensitization or irritation. | Unlikely to cause irritation. If irritation occurs: Wash with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation persists: Seek medical advice/attention. | - Chemical resistant gloves are recommended for prolonged or repeated contact See Section 8 |

| Eye Contact | 2В | Warning | Mild Irritant: May cause eye irritation. | If eyes are irritated: Remove contact lenses and rinse cautiously with water for several minutes. If eye irritation persists: Seek medical advice/attention. | - Wear safety glasses |
|----------------------|----|---------|--|--|--|
| Aspiration Hazard | NA | NA | Mild Respiratory Irritant: Dust may produce symptoms of cough and phlegm in workers with high exposures. | Remove to fresh-air. Reduce dust exposure through ventilation in areas of high Gilsonite® dust concentration. If aspiration irritation persists: Seek medical advice/attention. | - Wear a NIOSH- approved N95 half-mask disposable or re- useable particulate respirator. |
| Combustible Dust | NA | Warning | May form combustible dust concentrations in air. | Prevent dust accumulation by cleaning up the area. Electrically ground all equipment. Do not smoke or use an ignition source in an area with Gilsonite® dust. | - Use appropriate engineering controls such as exhaust ventilation and process enclosure. |

UN PIN No: Not regulated

WHMIS Classification: D2B – Skin and eye irritant

Physical State: Solid Color: Black Odor: Odorless to light odor

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient | CAS No. | EC ANNEX | Wt.% | Comments: |
|------------|------------|-----------|------|-------------|
| Gilsonite | 12002-43-6 | 310-127-6 | 100 | No comments |

EU- Directive 67/548:

Gilsonite® should be considered as a substance that is not hazardous

Chemical Identity:

Uintaite/Uintahite

Common Name:

Gilsonite®, Asphaltene

Impurities and Other Additives:

NA

4. FIRST AID MEASURES

| Route of Exposure | Symptoms/Effects | First Aid Measures | | |
|-------------------|--|--|--|--|
| Eye Contact | Irritant: Redness, Discomfort to eyes | Promptly wash eyes with copious amounts of water while lifting eye lids. Remove contact lenses. Continue to rinse for at least 15 minutes. If eye irritation persists: Seek medical advice/attention. | | |
| Skin Contact | Irritant: Dry skin, Redness | Not expected to require first aid measures. Remove contaminated clothing and launder before reuse. Wash skin thoroughly with soap and water. If skin irritation persists: Seek medical advice/attention. | | |

| Inhalation | Irritant: Persistent cough and/or phlegm | Not expected to require first aid measures. Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If inhalation irritation persists: Seek medical advice/attention. | |
|------------|--|--|--|
| Ingestion | NR | Not expected to be a primary route of exposure. If conscious, dilute with 2 – 3 glasses of water or milk. Induce vomiting if conscious. If ingestion irritation persists: Seek medical advice/attention. | |

General Note: Persons seeking medical attention should carry a copy of this GHS SDS with them.

5. FIRE FIGHTING MEASURES

Warning:

Explosive Dust

Flammable Properties:

Flash Point:

590°F (310°C)

Flammable Limits in Air – Lower (%):

Flammable Limits in Air - Upper:

250-500 g/m3

Auto ignition Temperature:

932°F (500°C)

Sensitivity to Impact:

NA

ND

Explosion Data:

Sensitivity to Static Discharge: Gilsonite® may form combustible dust concentrations in air. It is classified as St-2, strong explosion,

under the OSHA Directive Number CPL-03-00-008.

Suitable Extinguishing Media:

Use ABC fire extinguisher or water

Unsuitable Extinguishing Media:

NA

Protection of Fire-Fighters:

Special Fire-Fighting Procedures:

Do not enter fire area without proper personal protective equipment: including NIOSH approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool.

Keep water run off out of sewers and waterways.

Hazardous Combustion Products:

Oxides of Carbon and Nitrogen.

Conditions of Flammability:

Products are classified as flammable/combustible based on flash point as defined in the Health Canada Controlled Products Regulations, U.S. Occupational Health and Safety Administration Hazard Communication Standard and transportation regulations. See Sections 1, 2, & 5 for flammable/combustible classification information. Flammable/combustible materials may ignite and

burn if exposed to a flame or other sources of ignition.

Other Flammable Properties:

Particulates may accumulate static electricity. Dusts at sufficient

concentrations can form explosive mixtures with air.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

And Protective Equipment:

Use the personal protective equipment identified in Section 8.

Emergency and

Spill Procedures:

Evacuate the spill area with the exception of the spill response team. Wet

product may create a slipping hazard. Contain spilled material. Avoid the generation of dust. Sweep or shovel and place into closable container for

disposal.

Environmental Precautions:

Waste must be disposed of in accordance with federal, state and local laws.

7. HANDLING AND STORAGE

Handling:

Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid generating or breathing dust. Use with adequate ventilation or dust

control measures. Wash thoroughly after handling.

Storage:

Store in dry, well-ventilated area. Keep container closed. Store away from oxidizers and any ignition source. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits (TLV & PEL - 8H TWA);

| Ingredient | ACGIH TLV | OSHA PEL | Other | Notes |
|------------|--------------|-------------|-------|-------|
| Gilsonite® | NA | NA | NA | (1) |

Notes:

(1) Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m³ (Inhalable); 3 mg/m³ (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m³ (Total); 5 mg/m³ (Respirable).

Engineering Controls:

Use appropriate engineering controls such as, exhaust ventilation and process enclosures to prevent air contamination and keep workers' exposure below the applicable limits.

Personal Protective Equipment:

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created, and as such, further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Eye/Face Protection:

Safety Glasses

Skin Protection:

Wear appropriate clothing to prevent repeated or prolonged skin contact. Chemical resistant gloves recommended for prolonged or repeated contact. Use protective gloves made of: Nitrile, Polyvinylchloride (PVC), Natural Rubber, or Latex.

Respiratory Protection:

All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent. If exposed to airborne particles of this product use at least a dust mask or a NIOSH-approved N95 half-mask disposable or re-useable particulate respirator.

General Hygiene Considerations:

Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded, if contaminated with product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:

Black

Odor:

Odorless to Slight Odor

Physical Sate:

Solid

pH:

NA

Specific Gravity (H2O = 1):

1.04 - 1.08

Solubility (Water):

None

Flammable Properties:

Flash Point:

590°F (310°C)

Flammable Limits in Air – Lower (%):

ND

Flammable Limits in Air - Upper:

250-500 g/m³

Auto ignition Temperature:

932°F (500°C)

Sensitivity to Impact:

NA

Explosion Data:

Sensitivity to Static Discharge: Gilsonite Dust in the air is classified

as St-2, Strong Explosion

Melting/Freezing Point:

ND

Boiling Point:

ND

Vapor Pressure:

NΑ

Vapor Density (Air=1):

NA

Evaporation Rate:

NA

Octanol/Water Partition Coefficient:

Decomposition Temperature:

ND

Odor Threshold(s):

ND 550°F (288°C)

Viscosity:

NA

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable

Reactivity:

Nonreactive

Hazardous Reactions:

ND

Conditions to Avoid:

Keep away from heat, sparks, flame, and excessive heat above 550°F

(288°C). See Section 11.

Incompatible Materials:

Avoid use with strong oxidizers.

Hazardous Decomposition Products:

For thermal decomposition products upon heating above 550°F (288°C),

see Section 11.

11. TOXICOLOGICAL INFORMATION

Acute Exposure Effects,
Irritation and Sensitization:

See Section 2.

Chronic, Carcinogenicity, Reproductive Toxicity,

See Component Toxicological Summary and Product Toxicological

Information below.

Teratogenicity, Embryotoxicity, Mutagenicity Effects:

Synergistic Products/Effects:

ND

Routes of Exposure:

Skin and eye contact, inhalation, and ingestion

Symptoms:

Mild skin, eye, and respiratory irritant

Delayed/Immediate Effects:

ND

Chronic Effects:

None

Measures of toxicity:

Gilsonite® is not listed in the National Toxicology Program Report on Carcinogens (12th edition) and has not been found to be a potential carcinogen in the International Agency for Research on Cancer

Monographs (Volume 100) or by OSHA.

Component Toxicological Data:

Any adverse component toxicological effects and acute toxicity values (LD50s, LC50s) are listed below. If no effects or acute values are listed for

components, no such data were identified.

| | Component Toxicological Summary |
|---------------------------|--|
| Gilsonite Risk Studies | Studies have shown that naturally occurring Gilsonite® is not carcinogenic or mutagenic |
| | Processes in which Gilsonite® is brought to very high temperatures, however, may alter its structure and may produce a carcinogenic or mutagenic risk: 1. Gilsonite® distilled at 2500°F (1370°C) and dissolved in benzene was carcinogenic to mice when applied 3 times a week for 80 weeks. 2. Gilsonite® heated to 650°F (343°C) and cooled is mutagenic in the Ames assay. It is not recommended to heat Gilsonite® above 550°F (288°C). |

12. ECOLOGICAL INFORMATION

Ecotoxicity - Aquatic:

ND

Ecotoxicity - Terrestrial:

ND

Bioaccumulation Potential:

ND

Mobility in Soil:

ND

Other Adverse Environmental Effects: ND

Important Note: Gilsonite® is a naturally occurring solid hydrocarbon that has been shown in its natural state to be nontoxic to both aquatic and terrestrial life.

13. DISPOSAL CONSIDERATIONS

Safe Handling:

Refer to Section 7

Waste Classification:

ND

Waste Management:

Under U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of the disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. All labeled

precautions must be observed.

Disposal Method:

Recover and reclaim or recycle, if practical. Should Gilsonite® become a waste: Dispose of it in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted

industrial landfill.

14. TRANSPORT INFORMATION

U.S. DOT Shipping Description:

Not regulated for transportation by DOT, TDG, IMDG, ICAO/IATA.

Canada TDG Shipping Description:

Not regulated.

UN PIN No:

Not regulated.

IMDG Shipping Description:

Not regulated.

ICAO/IATA Shipping Description:

Not regulated.

15. REGULATORY INFORMATION

U.S. Federal and State Regulations:

SARA 311/312 (42 U.S.C. §§ 11021 and 11022 and implementing regulations) Hazard Categories: Fire Hazard

SARA 302/304, 313 (42 U.S.C. §§ 11002, 11004, and 11023); CERCLA RQ (40 C.F.R. §§ 302.4 and 302.5): This product is not subject to the referenced SARA and CERCLA regulations and is not expected to pose a significant risk under anticipated use conditions.

International Chemical Inventories

Australia AICS- Components are listed or exempt from listing.

Canada DSL- Components are listed or exempt from listing.

China Inventory- Components are listed or exempt from listing.

European Union EINECS/ELINCS- Components are listed or exempt from listing.

Japan METI ENCS- Components are listed or exempt from listing.

Korea TCCL ECL- Components are listed or exempt from listing.

New Zealand- Components are listed or exempt from listing.

Philippine PICCS- Components are listed or exempt from listing.

U.S. TSCA- Components are listed or exempt from listing.

U.S. TSCA- No components are subject to TSCA 12(b) export notification requirements.

NΑ

Canadian Classification: Controlled Products Regulations Statement (CPR): This product has been classified in accordance with the hazard criteria of the CPR and the GHS SDS contains all the information required by the CPR.

WHMIS Class: D2B- Skin and eye irritant.

16. OTHER INFORMATION

Preparation Date: 8/28/2013

Changes made since last revision:

Abbreviations:

ACGIH- American Conference of Governmental Industrial Hygienists

CPR- Controlled Products Regulation

NA- Not Applicable ND- Not Determined NR- None Reported

PNAH- Polynuclear Aromatic Hydrocarbon PNOS- Particulate Not Otherwise Specified PNOR- Particulate Not Otherwise Regulated

Other: Gilsonite® is a registered trademark of American Gilsonite®

Disclaimer of Liability:

This GHS SDS is furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. This GHS SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this GHS SDS information may not be applicable. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. No warranty, either expressed or implied, or liability of any nature with respect to this product or to the data herein is made or incurred hereunder.