SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information

Product Name : Diacel® D Additive
Material : 1101128, 1016923

Use : Cement Additive

Company : Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)

Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group
E-mail address : SDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification :
Carcinogenicity, Category 1A
Specific target organ toxicity - repeated exposure, Category 1,
Inhalation, Lungs

Labeling

SDS Number:100000014341
Diacel® D Additive

Symbol(s):  
Signal Word: Danger

Hazard Statements:  
H350: May cause cancer.
H372: Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

Precautionary Statements:  
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapor/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage:  
P405 Store locked up.
Disposal:  
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC: Group 1: Carcinogenic to humans
Crystalline Silica 14808-60-7

NTP: Known to be human carcinogen
Crystalline Silica 14808-60-7

ACGIH: Suspected human carcinogen
Crystalline Silica 14808-60-7

SECTION 3: Composition/information on ingredients

Synonyms: Diatomite
Diatomaceous Earth
Kieselguhr

Molecular formula: UVCB

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

General advice: Move out of dangerous area. Show this material safety data.

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Diacel® D Additive

Version 2.1

Revision Date 2019-12-09

sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : If symptoms persist, call a physician.
In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed : Do NOT induce vomiting. Keep respiratory tract clear.

SECTION 5: Firefighting measures

Flash point : Not applicable
Autoignition temperature : Not applicable

Unsuitable extinguishing media : High volume water jet.
Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and explosion protection : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Hazardous decomposition products : No data available.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling

Advice on safe handling : Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Storage

Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use: Cement Additive

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diatomaceous Earth</td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>6 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>20 Million particles per cubic foot</td>
<td>a, Dust</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>80mg/m³ / %SiO₂</td>
<td>Dust</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>250mppcf / %SiO₂+5</td>
<td>(f), a, b, respirable</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>15mg/m³ / %SiO₂+2</td>
<td>(f), e, respirable</td>
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<tr>
<td></td>
<td>OSHA Z-3</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable dust fraction</td>
</tr>
<tr>
<td>ACGIH</td>
<td>TWA</td>
<td>0.025 mg/m³</td>
<td></td>
<td>Lung cancer, pulm fibrosis, A2, Respirable fraction</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>0.05 mg/m³</td>
<td>(7), Respirable dust</td>
</tr>
</tbody>
</table>

(7) See Table Z-3 for the exposure limit for any operations or sectors where the exposure limit in §1910.1053 is stayed or is otherwise not in effect.

(f) This standard applies to any operations or sectors for which the respirable crystalline silica standard, 1910.1053, is stayed or is otherwise not in effect.

a Based on impinger samples counted by light-field techniques.

A2 Suspected human carcinogen

b The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.

e Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics: Aerodynamic diameter (unit density sphere): 2; Percent passing selector: 90 Aerodynamic diameter (unit density sphere): 2.5; Percent passing selector: 75 Aerodynamic diameter (unit density sphere): 3.5; Percent passing selector: 50 Aerodynamic diameter (unit density sphere): 5.0; Percent passing selector: 25 Aerodynamic diameter (unit density sphere): 10; Percent passing selector: 0. The measurements under this note refer to the use of an AEC (now NRC) instrument. The respirable fraction of coal dust is determined with an MRE; the figure corresponding to that of 2.4 mg/m³ in the table for coal dust is 4.5 mg/m³.

lung cancer Lung cancer

pulm fibrosis Pulmonary fibrosis

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure.

Hand protection: The suitability for a specific workplace should be discussed

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with the producers of the protective gloves. Please observe
the instructions regarding permeability and breakthrough time
which are provided by the supplier of the gloves. Also take into
consideration the specific local conditions under which the
product is used, such as the danger of cuts, abrasion, and the
contact time. Gloves should be discarded and replaced if there
is any indication of degradation or chemical breakthrough.

Eye protection          : Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection: Choose body protection in relation to its type, to the
concentration and amount of dangerous substances, and to the
specific work-place. Wear as appropriate.: Lightweight
protective clothing.

Hygiene measures         : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance
Form                      : Powder
Physical state            : Solid
Color                     : off-white

Safety data
Flash point               : Not applicable
Lower explosion limit     : Not applicable
Upper explosion limit     : Not applicable
Oxidizing properties     : no
Autoignition temperature : Not applicable
Molecular formula         : UVCB
Molecular weight          : 
\text{pH}                  : 6 - 8
Pour point                : No data available
Boiling point/boiling range: Not applicable
Vapor pressure            : Not applicable
Relative density         : 2
Water solubility          : Negligible
Partition coefficient: n-octanol/water : No data available
**Diacel® D Additive**

**SECTION 10: Stability and reactivity**

**Chemical stability**: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

**Hazardous reactions**: Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

**Conditions to avoid**

**Hazardous decomposition products**: No data available.

**Other data**: No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

**Diacel® D Additive**

**Acute oral toxicity**: LD50: unknown

**Acute inhalation toxicity**: LC50: not known

**Acute dermal toxicity**: LD50: unknown

**Skin irritation**: No skin irritation

**Eye irritation**: No eye irritation

**Aspiration toxicity**: No aspiration toxicity classification.

**CMR effects**

**Crystalline Silica**: Carcinogenicity: Positive evidence from human epidemiological studies (inhalation)
Biodegradability : Not applicable

Elimination information (persistence and degradability)
Additional ecological information : No data available

Ecotoxicology Assessment
Short-term (acute) aquatic hazard : No data available
Long-term (chronic) aquatic hazard : No data available

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.
Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.
IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO – KNOW

SARA 302 Threshold Planning Quantity : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act
Ozone-Depletion : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

US State Regulations

Pennsylvania Right To Know : Crystalline Silica - 14808-60-7
New Jersey Right To Know : Crystalline Silica - 14808-60-7

California Prop. 65 Components : WARNING! This product contains a chemical known in the State of California to cause cancer.

Notification status

Europe REACH : On the inventory, or in compliance with the inventory
Switzerland CH INV : Not in compliance with the inventory
United States of America (USA) TSCA : On or in compliance with the active portion of the TSCA inventory
Canada DSL : On the inventory, or in compliance with the inventory
Australia AICS : On the inventory, or in compliance with the inventory
New Zealand NZIoC : On the inventory, or in compliance with the inventory
Japan ENCS : On the inventory, or in compliance with the inventory
Korea KECI : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.

Philippines PICCS : On the inventory, or in compliance with the inventory
China IECSC : On the inventory, or in compliance with the inventory
Taiwan TCSI : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0
Further information

Legacy SDS Number : 25550

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

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 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.

Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DLC</td>
<td>LD50</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
</tr>
<tr>
<td>NDL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>NL</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>NZioC</td>
<td>New Zealand Inventory of Chemicals</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>EC50</td>
<td>No Observable Adverse Effect Level</td>
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<tr>
<td>EC50</td>
<td>No Observed Effect Concentration</td>
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<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
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<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty Chemicals Association</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
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<tr>
<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
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<tr>
<td>KN</td>
<td>Presumed Not Toxic</td>
</tr>
<tr>
<td>Ghs</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>PCM</td>
<td>Short-term Exposure Limit</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
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<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
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<tr>
<td>STEL</td>
<td>Threshold Limit Value</td>
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<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
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<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
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<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
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<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
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<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
</tr>
<tr>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
</tbody>
</table>