



SAFETY DATA SHEET

Permian Blend

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Permian Blend
Other means of identification : N/A
Recommended use : Drilling Fluid Additive
Restrictions on use : None known
Company : DrillChem Drilling Solutions, LLC
PO Box 132107
Spring, TX 77393 USA
Office: (281) 713-8941
Emergency telephone : (800) 424-9300 (24 Hours) CHEMTREC
number
Issuing date : 6/9/2023

Section: 2. HAZARDS IDENTIFICATION

WHMIS Classification : Not a WHMIS controlled substance
OSHA Hazards : No known OSHA hazards

GHS Label element

Signal Word : None
Hazard Statements : None
Precautionary Statements : P281: Use personal protective equipment as required (see Section 8).

HMIS Classification

Health hazard : 1
Flammability : 1
Physical hazards : 1

Potential Health Effects

Inhalation : Odors/vapors may be a nuisance in some individuals. In some individuals, short term exposure of material may produce mild and temporary discomfort to the respiratory tract resulting in wheezing, tightness in the chest, shortness of breath and coughing. Although they may be present in low amounts, dust and small pieces of material may aggravate bronchitis, asthma, and emphysema if inhaled.

Skin : Although fine material, particulate matter and dust may be present in low quantities, contact with such items may result in irritation (redness/itching) or other effects.

Eyes : Material is abrasive if it enters the eye, which can cause irritation to severe damage if left untreated.

Repeat Exposure : Repeated exposure to material may result in sensitization in susceptible individuals.

Other hazards : None known.

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Section: 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%wt)
Carbon Black	1333-86-4	15 - 25
Zinc Oxide	1314-13-2	0.1 - 1
Sulfur	7704-34-9	0.1 – 0.5
Cellulose	9004-34-6	5 - 20

* All other components are below reportable quantities or proprietary.

Section: 4. FIRST AID MEASURES

- In case of eye contact : Flush eyes with plenty of water for at least 15 minutes. Avoid rubbing the eye. If experiencing prolonged irritation or soreness, seek medical attention.
- In case of skin contact : Wash exposed skin thoroughly with soap and water. If irritation develops and is prolonged and/or sore, consult a physician.
- If swallowed : Do not induce vomiting. Rinse mouth well with water. Never give anything by mouth to an unconscious person. Seek medical attention.
- If inhaled : In emergency situations, use proper respiratory protection and immediately remove the affected person from exposure. Keep at rest. Administer artificial respiration if breathing has stopped. Seek medical attention.
- General advice : If negative symptoms develop while handling the product, move out of the area to prevent further exposure. Consult a physician as a precautionary measure if symptoms develop after being subjected to unprotected exposure of the material. Show this safety data sheet to the doctor in attendance.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Fire extinguishing substances: dirt, sand, dry chemical, CO₂, alcohol-resistant foam, or F500 encapsulating agent. If safe to do so, smothering the fire with large quantities of dirt or sand is usually the best option for extinguishing fires. The material will be extremely hot if in liquid form. Be sure to keep distance between personnel and the fire.

If the fire is small and localized, CO₂ or foam are acceptable extinguishing substances. Due to the potential of pyrolytic oil being produced during uncontrolled burning, use of water may result in highly contaminated run-off that will require containment.

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For large fires, trained firefighting personnel should be placed in charge of firefighting measures.

- Unsuitable extinguishing media : None known.
- Hazardous combustion products : Thick, black, acrid smoke. Oxides of carbon, nitrogen and sulfur. Uncontrolled burning may result in products of incomplete combustion including polynuclear aromatic hydrocarbons (naphthalene, anthracene, etc); aromatic hydrocarbons including benzene, toluene, xylene, styrene, etc; paraffinic oils; particulate and ash residues.
- Special protective equipment for firefighters : Respiratory and eye protection are required for firefighting personnel. A self-contained breathing apparatus (SCBA) meeting NFPA standards should be used for any significant indoor or outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required. Contact with the smoke and fumes should be avoided. With burning or high heating, the material may melt, resulting in a sticky, molten material.
- Specific extinguishing methods : Use standard firefighting procedures and consider the hazards of other involved materials.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation to keep material component levels below workplace exposure limits. Avoid excessive dust formation and accumulation. Avoid prolonged exposure to vapors/odors and dusts created by material.
- Environmental precautions : Precautionary measures to prevent large quantities of the product from entering and/or accumulating in drains should be implemented. In case of emergency, prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : LAND SPILL : Sweep or vacuum material to prevent slip hazard. Try not to create dust. Collect for reuse if possible.
WATER SPILL: Material floats initially. Attempt to contain floating material and remove it from the surface by skimming first. Contain area and, if material sinks, try to recover material as best possible without disturbing surroundings.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : For any application, use in a well-ventilated area or set engineering controls (ventilation) to keep airborne concentrations below the workplace exposure limits and prevent the build up of dust. Do not handle or store near an open flame or sources of heat.
- Conditions for safe storage : Keep material away from incompatible materials or conditions. Material can be safely stored outdoors in a contained or sectioned off area. If material is stored inside, it should be kept in a well-ventilated location to keep airborne concentrations below the workplace exposure limits.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Components with workplace control parameters

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m ³	Respirable Dust
Zinc Oxide (CAS 1314-13-2)	TWA	2 mg/m ³	Respirable Dust
Sulfur (CAS 7704-34-9)	TWA	10 mg/m ³	Respirable Dust

Personal protective equipment

- Eye protection : Although they may be present in low concentration, if dust or fines are likely to become airborne, safety glasses with side shields or goggles should be worn. When using eye protection, equipment should be tested and approved under appropriate government standards such as NIOSH.
- Skin and hand protection : Short term exposure does not require gloves. Gloves are recommended for continuous or prolonged exposure of material. Any type of protective gloves are recommended to avoid prolonged or repeated skin contact. If gloves are disposable, dispose of contaminated gloves after use in accordance with applicable laws and work place practices. If gloves are re-usable, wash periodically to avoid build up of material matter. Wash and dry hands. Long sleeved clothing and full length pants should be worn if repeated or prolonged direct contact is likely to occur.
- Respiratory protection : Respiratory protection is typically not required. Where protection from nuisance levels of dust are desired, use of a dust mask is recommended. Typical certified dusts masks types are N95.
- Hygiene measures : Handle in accordance with good industrial and commercial hygiene and safety practices. Wash hands before breaks and at the end of the work day.
- Specific engineering controls : Use in a well-ventilated area or set engineering controls to keep airborne concentrations below the exposure limits.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Solid – small irregularly granules and flakes
- Colour : Black with Tan flakes
- Odour : Rubber or hydrocarbon-like
- Flash point : >212°F (100°C)
- pH : not applicable
- Odour Threshold : no data available
- Freezing point : no data available
- Initial boiling point and boiling range : no data available
- Evaporation rate : Does not evaporate

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Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: no data available
Density	: 1.06 – 1.3
Water solubility	: Not soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition temperature	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
Flash Point	: no data available

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Material is stable under normal conditions.
Possibility of hazardous reactions	: No data available.
Conditions to avoid	: Material may slowly degrade on storage, especially in the presence of iron particles and combined with heat or pressure, subsequently releasing carbon monoxide and carbon dioxide. Heat, ignition sources, and oxidizing agents should be avoided. Although typically present in small amounts, dust may be explosive under certain conditions (i.e. high airborne concentrations) in the presence of an ignition source.
Incompatible materials	: Acids, oxidizing agents, iron particles.
Hazardous decomposition products	: Oxides of carbon, nitrogen and metals under fire or oxidative conditions

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Section: 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Oral LD50 : No data available

Inhalation LD50 : No data available

Dermal LD50 : No data available

Other information on acute toxicity : No data available

Skin Corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitization : No data available

Germ cell mutagenicity : No data available.

Carcinogenicity : This product contains a component (when isolated) that has been reported to be possibly carcinogenic (specifically when inhaled) based on its IARC, ACGIH, NTP or EPA classification. Limited evidence to carcinogenicity in animal studies. IARC: 2B – Group 2B: Possibly carcinogenic to humans (Carbon black)

Reproductive toxicity : No data available

Specific target organ toxicity – single exposure : No data available

Specific target organ toxicity – repeated exposure : No data available

Potential health effects

Inhalation : Odor/vapors may be a nuisance in some individuals. In some individuals, short term exposure of material may produce mild and temporary discomfort to the respiratory tract resulting in wheezing, tightness in the chest, shortness of breath and coughing. Although they may be present in low amounts, dust and small pieces of material may aggravate bronchitis, asthma, and emphysema if inhaled. Small cuts to the airway may result if pieces of metal are inhaled.

Skin : Although fine material, particulate matter and dust may be present in low quantities, contact with such items may result in irritation (redness/itching) or other effects.

Eyes : Material is abrasive if it enters the eye, which can cause irritation to severe damage if left untreated.

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- Ingestion** : Irritation of mucus membranes of mouth, throat, esophagus and stomach along with nausea may occur. Abrasion to the mouth, esophagus, stomach and intestinal tract may occur.
- Signs and Symptoms of Exposure** : To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
- Synergistic effects** : No data available
- Additional information** : None

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Mobility in soil

No data available

Bioaccumulative potential

No data available

PBT and vPvB assessment

No data available

Other adverse effects

Extensive ecological testing has not been performed on the product. Standard good environmental workplace practices should be implemented when handling material in a workplace or external setting.

Section: 13. DISPOSAL CONSIDERATIONS

- Disposal methods** : 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.
- 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.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT):

Not regulated as dangerous goods.

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Air transport (IATA)

Not regulated as dangerous goods

Sea transport (IMDG/IMO)

Not regulated as dangerous goods

Section: 15. REGULATORY INFORMATION

WHMIS Classification

Not WHMIS controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

OSHA Hazards

No known OSHA hazards

Section: 16. OTHER INFORMATION

HMIS III:

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : None

Version Number : 1.0

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.