## SAFETY DATA SHEET



# DRILL-SURE<sup>™</sup> OBM Additive

Version 2.4

Revision Date 2022-08-22

Product information	
Product Name Material	: DRILL-SURE™ OBM Additive : 1114973
Company	: Chevron Phillips Chemical Company LP Drilling Specialties Company LLC 10001 Six Pines Drive The Woodlands, TX 77380
Emergency telephone	:
Asia: CHEMWATCH Mexico CHEMTREC South America SOS Argentina: +(54)-115 EUROPE: BIG +32.7 Austria: VIZ +43 1 44 Belgium: 070 245 24 Bulgaria: +359 2 915 Croatia: +3851 2348 Cyprus: 1401 Czech Republic: Tox Denmark: Danish Po Estonia: BIG +32.14 Finland: 0800 147 1 France: ORFILA nur Germany: BIG +32.1	ernational) 4.9300 or 703.527.3887(int'l) I (+612 9186 1132) China: 0532 8388 9090 5 01-800-681-9531 (24 hours) -Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 59839431 I4.584545 (phone) or +32.14583516 (telefax) 06 43 43 (24 hours/day, 7 days/week) I5 (24 hours/day, 7 days/week)

#### DRILL-SURE<sup>™</sup> OBM Additive Version 2.4 Revision Date 2022-08-22 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week) Malta: +356 2395 2000 The Netherlands: NVIC: +31 (0)88 755 8000 Norway: 22 59 13 00 (24 hours/day, 7 days/week) Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Portugal: CIAV phone number: +351 800 250 250 Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week) Sweden: 112 – ask for Poisons Information 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 Combustible dust Labeling Signal Word : Warning Hazard Statements : May form combustible dust concentrations in air. **Potential Health Effects Physical Hazards** : Mechanical processing may form combustible dust concentrations in air and thermal processing at elevated temperatures may generate simple hydrocarbons and carbon oxides. **Carcinogenicity:** IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. **SECTION 3: Composition/information on ingredients** DRILLING MUD ADDITIVE Synonyms HTHP Fluid Loss Additive Drill-Sure OBM SDS Number:100000101560 2/13

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#### Molecular formula : UVCB

Component	CAS-No.	Weight %
Asphalt, oxidized, sulfonated, sodium	1394242-48-8	80 - 85
salt		

#### SECTION 4: First aid measures

General advice	: No hazards which require special first aid measures.	
If inhaled	: Consult a physician after significant exposure. If unconse place in recovery position and seek medical advice.	cious,
In case of eye contact	: Remove contact lenses. Protect unharmed eye. Keep e wide open while rinsing.	ye
If swallowed	: Keep respiratory tract clear. Never give anything by mou an unconscious person. If symptoms persist, call a physi	

#### **SECTION 5: Firefighting measures**

Flash point	:	Not applicable
Autoignition temperature	:	No data available
Unsuitable extinguishing media	:	High volume water jet.
Specific hazards during fire fighting	:	Risks of ignition followed by flame propagation or secondary explosions can be caused by the accumulation of dust, e.g. on floors and ledges.
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 generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.
<b>SECTION 6: Accidental release</b>	me	asures
Personal precautions	:	Avoid dust formation.
Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities.
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Methods for cleaning up	:	Pick up and arrange disposal without creating dust. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal.
Additional advice	:	Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
CTION 7: Handling and stor	age	
Handling		
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient.
Advice on protection against fire and explosion	:	Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Provide appropriate exhaust ventilation at places where dust is formed.
Storage		
Requirements for storage	:	5 1 5
areas and containers		technological safety standards.
areas and containers	s/per	
CTION 8: Exposure controls Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh	trol ai rds o nces i ent. I of this nould	
CTION 8: Exposure controls Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh	trol ai rds o nces i ent. I of this nould tion is	sonal protection irborned concentrations below the exposure guidelines/limits. f this material (see Section 2), applicable exposure limits, job in the work place when designing engineering controls and selectin If engineering controls or work practices are not adequate to prever a material, the personal protective equipment listed below is read and understand all instructions and limitations supplied with a usually provided for a limited time or under certain circumstances.
CTION 8: Exposure controls Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh the equipment since protect	trol ai rds o nces i ent. I of this nould tion is	sonal protection irborned concentrations below the exposure guidelines/limits. f this material (see Section 2), applicable exposure limits, job in the work place when designing engineering controls and selectin If engineering controls or work practices are not adequate to preven a material, the personal protective equipment listed below is read and understand all instructions and limitations supplied with a usually provided for a limited time or under certain circumstances

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	purifying respirators may not provide adequate protection	on.
Hand protection	: The suitability for a specific workplace should be discuss with the producers of the protective gloves. Please obs the instructions regarding permeability and breakthroug which are provided by the supplier of the gloves. Also the consideration the specific local conditions under which product is used, such as the danger of cuts, abrasion, a contact time. Gloves should be discarded and replaced is any indication of degradation or chemical breakthroug	serve gh time ake into the and the d if there
Eye protection	: Eye wash bottle with pure water. Safety glasses.	
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, an specific work-place. Wear as appropriate:. Protective safety shoes.	
Hygiene measures	: When using do not eat or drink. When using do not sm Wash hands before breaks and at the end of workday.	oke.
CTION 9: Physical and chem	cal properties	
Information on basis abus	and a haminal properties	
Appearance	cal and chemical properties	
Form Physical state Color Odor Odor Threshold	<ul> <li>Fine Powder</li> <li>solid</li> <li>Dark Brown, Black</li> <li>no odor</li> <li>No data available</li> </ul>	
Safety data		
Flash point	: Not applicable	
Lower explosion limit	: Not applicable	
Upper explosion limit	: Not applicable	
Autoignition temperature	: No data available	
Thermal decomposition	: No data available	
Molecular formula	: UVCB	
рН	: Not applicable	
Melting point/range	: No data available	
Boiling point/boiling range	: Not applicable	
Vapor pressure	: Not applicable	
Deletive density	: 1.4 - 1.6	
Relative density	-	

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sion 2.4	Revision Date 2022
Deneitre	: No data available
Density	
Water solubility	: partly soluble
Partition coefficient: n- octanol/water	: No data available
Relative vapor density	: Not applicable
Evaporation rate	: No data available
TION 10: Stability and react	ivity
Reactivity	: Stable at normal ambient temperature and pressure.
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous rea	actions
Hazardous reactions	: Further information: No decomposition if stored and applied directed.
Conditions to avoid	: No data available.
Materials to avoid	: No data available.
Thermal decomposition	: No data available
Other data	: No decomposition if stored and applied as directed.
TION 11: Toxicological info	rmation
DRILL-SURE™ OBM Additiv Acute oral toxicity	ve : LD50: > 5,000 mg/kg Species: Rat Sex: male and female
DRILL-SURE™ OBM Additiv Acute inhalation toxicity	<ul> <li>ve</li> <li>LC50: &gt; 5.3 mg/l Exposure time: 4 h Species: Rat Sex: male and female Test atmosphere: dust/mist Method: OECD Test Guideline 403 Rats exposed to a 5.3 mg/L dust aerosol for 4-hr resulted in effects generally expected with high concentrations of dust</li> </ul>
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	aerosols made of relatively dense particles. Higher lung weight and atelectasis persisted after the 14-day recovery period. There were no reports of lethality or any significant clinical observations. There was however an acute inflammatory response with evidence of recovery after 14- days. The presence of particulate matter with indication of partial clearance from the lung after the 14-day recovery period was noted. These effects would not be expected during normal operating conditions when using this substance.
DRILL-SURE™ OBM Additive Acute dermal toxicity :	No data available
DRILL-SURE™ OBM Additive Skin irritation :	No skin irritation
DRILL-SURE™ OBM Additive Eye irritation :	No eye irritation
DRILL-SURE™ OBM Additive Sensitization :	Did not cause sensitization on laboratory animals.
DRILL-SURE™ OBM Additive Repeated dose toxicity :	Species: Rat, male and female Sex: male and female Application Route: oral gavage Dose: 0, 250, 500, 1000 mg/kg Exposure time: 43 - 54 d Number of exposures: daily NOEL: 1,000 mg/kg Method: OECD Guideline 422 No adverse effects expected
	Species: Rat, male and female Sex: male and female Application Route: oral gavage Dose: 0, 100, 300, 1000 mg/kg Exposure time: 90 d Number of exposures: daily Method: OECD Test Guideline 408 No adverse effects expected
DRILL-SURE™ OBM Additive Genotoxicity in vitro :	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Test Type: Chromosome aberration test in vitro Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative
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	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Guideline 476 Result: negative
DRILL-SURE™ OBM Additive Reproductive toxicity :	Species: Rat Sex: male and female Application Route: oral gavage Dose: 0, 250, 500, 1000 mg/kg Exposure time: 43-54 d Number of exposures: daily Method: OECD Guideline 422 NOAEL Parent: 1,000 mg/kg NOAEL F1: 1,000 mg/kg No adverse effects expected
DRILL-SURE™ OBM Additive Developmental Toxicity :	Species: Rat Application Route: oral gavage Dose: 0, 250, 500, 1000 mg/kg Number of exposures: daily Test period: 54 d NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg No adverse effects expected
	Species: Rat Application Route: oral gavage Dose: 0, 100, 300, 1000 mg/kg Number of exposures: daily Test period: GD 6 - 20 Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg No adverse effects expected
Toxicology Assessment	
DRILL-SURE™ OBM Additive CMR effects :	Carcinogenicity: Not available Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
DRILL-SURE™ OBM Additive Further information :	Product dust may be irritating to eyes, skin and respiratory system.

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SECTION 12: Ecological information	
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Toxicity to fich	$\cdot 1000 \times 240 \text{ mg/l}$
Toxicity to fish	: LC50: > 240 mg/l Exposure time: 96 h Species: Scophthalmus maximus (Flatfish, Flounder) semi-static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: LC50: 380 mg/l Exposure time: 48 h Species: Acartia tonsa (Marine Copepod) static test Method: ISO TC147/SC5/WG2
Toxicity to algae	: EbC50: 240 mg/l Exposure time: 72 h Species: Skeletonema costatum (Marine Algae) static test Method: ISO 10253
	ErC50: 390 mg/l Exposure time: 72 h Species: Skeletonema costatum (Marine Algae) static test Method: ISO 10253
Biodegradability	<ul> <li>Result: Not readily biodegradable.</li> <li>3 %</li> <li>Testing period: 28 d</li> <li>Method: Closed Bottle test</li> </ul>
Elimination information (persis	nce and degradability)
Bioaccumulation	: The product may be accumulated in organisms.
Mobility	: No data available
Results of PBT assessment	: Non-classified PBT substance, Non-classified vPvB substan
Additional ecological information	: This material is not expected to be harmful to aquatic organisms.
Ecotoxicology Assessment	
Short-term (acute) aquatic hazard	: This material is not expected to be harmful to aquatic organisms.
Long-term (chronic) aquatic hazard	: This material is not expected to be harmful to aquatic organisms.

#### SECTION 13: Disposal considerations

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

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Use material for its intended pur may meet the criteria of a hazar other State and local regulations regulated components may be r	rpose or recycle if possible. This material, if it must be discarded, dous waste as defined by US EPA under RCRA (40 CFR 261) or s. Measurement of certain physical properties and analysis for necessary to make a correct determination. If this material is a, federal law requires disposal at a licensed hazardous waste
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.
ECTION 14: Transport informatio	n
The shipping descriptions sho shipments in non-bulk packag	own here are for bulk shipments only, and may not apply to ges (see regulatory definition).
Goods Regulations for additiona etc.) Therefore, the information	ic or international mode-specific and quantity-specific Dangerous al shipping description requirements (e.g., technical name or names, shown here, may not always agree with the bill of lading shipping shpoints for the material may vary slightly between the SDS and the
	PARTMENT OF TRANSPORTATION) AZARDOUS MATERIAL OR DANGEROUS GOODS FOR IS AGENCY.
•	. <b>MARITIME DANGEROUS GOODS)</b> AZARDOUS MATERIAL OR DANGEROUS GOODS FOR IS AGENCY.
IATA (INTERNATIONAL AIR T NOT REGULATED AS A HA TRANSPORTATION BY THI	ZARDOUS MATERIAL OR DANGEROUS GOODS FOR
	<b>EROUS GOODS BY ROAD (EUROPE))</b> AZARDOUS MATERIAL OR DANGEROUS GOODS FOR IS AGENCY.
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#### Maritime transport in bulk according to IMO instruments

	nation
National legislation	
SARA 311/312 Hazards	: Combustible dust
CERCLA Reportable Quantity	: This material does not contain any components with a CERCLA RQ.
SARA 302 Reportable Quantity	: This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity	: This material does not contain any components with a section 302 EHS TPQ.
SARA 304 Reportable Quantity	: This material does not contain any components with a section 304 EHS RQ.
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	
Potential Class	product neither contains, nor was manufactured with a Class I or II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR ubpt. A, App.A + B).
This product does not contai Act Section 112 (40 CFR 61)	n any hazardous air pollutants (HAP), as defined by the U.S. Clean Ai ).
	n any chemicals listed under the U.S. Clean Air Act Section 112(r) for on (40 CFR 68.130, Subpart F).
Accidental Release Preventi	on (40 CFR 68.130, Subpart F). In any chemicals listed under the U.S. Clean Air Act Section 111 SOCI
Accidental Release Preventi This product does not contai	on (40 CFR 68.130, Subpart F). In any chemicals listed under the U.S. Clean Air Act Section 111 SOCI

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Version 2.4 Revision Date 2022-08-22 Pennsylvania Right To Know : Asphalt, oxidized, sulfonated, sodium salt - 1394242-48-8 California Prop. 65 : This product does not contain any chemicals known to the State Components of California to cause cancer, birth, or any other reproductive defects. **Notification status** Europe REACH This product is in full compliance according to REACH 5 regulation 1907/2006/EC. Switzerland CH INV Not in compliance with the inventory United States of America (USA) On or in compliance with the active portion of the : TSCA **TSCA** inventory Canada DSL All components of this product are on the Canadian DSL On the inventory, or in compliance with the inventory Other AIIC 2 Not in compliance with the inventory Japan ENCS 1 Not in compliance with the inventory New Zealand NZIoC : Not in compliance with the inventory Korea KECI 1 Philippines PICCS : Not in compliance with the inventory Taiwan TCSI Not in compliance with the inventory 1 China IECSC Not in compliance with the inventory 2 **SECTION 16: Other information** NFPA Classification : Health Hazard: 1 Fire Hazard: 2 Reactivity Hazard: 0 2 1 0

#### Further information

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.

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ł	Key or legend to abbreviations and a	cronvms use	d in the safety data sheet
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect
DSL	Canada, Domestic Substances	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		