

1. Identification

Product identifier **Basic Sediment and Water (BS&W)**

Other means of identification Not available.

Recommended use Natural Gas Production Liquids

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name Noble Energy, Inc.

Address 1001 Noble Energy Way
 Houston, TX 77070 US
 US

Telephone Non-emergency Telephone: 720-587-2085

E-mail SDSGLOBAL@nobleenergyinc.com

Emergency phone number 24 Hour Emergency: 1-760-476-3962
 Access code 333053

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Germ cell mutagenicity Category 1B
 Carcinogenicity Category 1B

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause genetic defects. May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients
Mixtures

Chemical name	CAS number	%
Water	7732-18-5	> 75
Sand	308075-07-2	< 5
Petroleum Distillate	64741-47-5	< 2

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. BS&W is taken from condensate tanks and may contain quantities of highly volatile and explosive contaminants. See SDS Condensate for specific hazards.

4. First-aid measures

Inhalation	If symptomatic, move to fresh air. Get medical attention if symptoms persist.
Skin contact	Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.
Ingestion	Seek medical advice.
Most important symptoms/effects, acute and delayed	May cause cancer. May cause genetic defects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use any media suitable for the surrounding fires.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	May contain harmful concentrations of hydrogen sulfide, which can accumulate in the head space.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate personal protective equipment (See Section 8).
Methods and materials for containment and cleaning up	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste for proper disposal. Large Spills: Flush with plenty of water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Use only with adequate ventilation.
Conditions for safe storage, including any incompatibilities	Keep containers tightly closed. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Chemical resistant gloves are recommended.
Other	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister.
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.

9. Physical and chemical properties

Appearance	Opaque liquid.
Physical state	Liquid.
Form	Opaque liquid.
Color	Opaque.
Odor	Salty to slightly hydrocarbon
Odor threshold	Not relevant.
pH	6.5 - 8
Melting point/freezing point	33.8 °F (1 °C)
Initial boiling point and boiling range	212 °F (100 °C) at 1 atmosphere
Flash point	Not relevant.
Evaporation rate	< 1 BuAc
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%) temperature	Not relevant.
Flammability limit - upper (%) temperature	Not relevant.
Vapor pressure	Not relevant.
Vapor density	Not relevant.
Solubility(ies)	
Solubility (water)	10 - 99 % Solubility complete except for possible crude component
Auto-ignition temperature	Not relevant.
Decomposition temperature	Not relevant.
Viscosity	varies based on solids content
Other information	
Bulk density	10 lb/gal
VOC (Weight %)	Negligible

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information**Information on likely routes of exposure**

Ingestion	No adverse effects due to ingestion are expected.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	May be irritating to the skin.
Eye contact	Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics May cause cancer. May cause genetic defects.

Information on toxicological effects

Basic Sediment and Water (BS&W)

914976 Version #: 03 Revision date: 14-July-2014 Issue date: 14-July-2014

SDS US

3 / 6

Acute toxicity

Components	Species	Test Results
Petroleum Distillate (CAS 64741-47-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 1900 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 4980 mg/m3 > 4980 mg/m3, 4 Hours > 4970 mg/m3, 4 Hours > 5 mg/l, 4 Hours > 4.96 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	> 4800 mg/kg
Skin corrosion/irritation	Prolonged or repeated skin contact may cause irritation.	
Serious eye damage/eye irritation	Not classified.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	Not a skin sensitizer.	
Germ cell mutagenicity	May cause genetic defects.	
Carcinogenicity	May cause cancer.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	

12. Ecological information

Ecotoxicity	The product components are 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.
Persistence and degradability	Not established.
Bioaccumulative potential	Not available.
Mobility in soil	Not available.
Other adverse effects	Not established.

13. Disposal considerations

Disposal instructions	Do not discharge into drains, water courses or onto the ground. Discharge, treatment, or disposal may be subject to national, state, or local laws.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Since emptied containers retain product residue, follow label warnings even after container is emptied.

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 Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Not regulated.

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

Not listed.

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

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
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)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

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).

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

Issue date 14-July-2014

Revision date 14-July-2014

Version # 03

NFPA ratings



References

ECHA registered substances database
 HSDB® - Hazardous Substances Data Bank
 IARC Monographs. Overall Evaluation of Carcinogenicity
 National Toxicology Program (NTP) Report on Carcinogens
 Registry of Toxic Effects of Chemical Substances (RTECS)

Disclaimer

The information provided herein is believed to be accurate as of the date of issue, but is offered without guarantee. The information provided may not be complete, as it is not practicable to provide all scientific information in the format of this document. Further, additional information may be necessary under exceptional conditions of use, or because of applicable laws or regulations. Noble Energy, Inc. does not assume any liability arising out of product use even if safety procedures are followed as outlined herein. The user has the responsibility for evaluating the adequacy of the information under the conditions of use and obtaining additional information where uncertainty exists. No express or implied guarantees are made as to the effects of use, the results to be obtained, or the safety and toxicity of the product in any specific application. The user assumes all risks of use of the product. Noble Energy, Inc. expressly disclaims all warranties of every kind including warranties of merchantability and fitness for any particular purpose. Nothing herein is intended to be construed as permission or recommendation for use of the product in any manner which might infringe existing patents.