HALLIBURTON

SAFETY DATA SHEET

GRAPHITE

Revision Date: 29-Jan-2015 Revision Number: 11

1. Product Identifier & Identity for the Chemical

Statement of Hazardous Nature Non-Hazardous according to the criteria of the 3rd Revised Edition of the Globally

Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous

Goods according to the criteria of ADG.

1.1. Product Identifier

Product Name GRAPHITE

Other means of Identification

Synonyms: None Product Code: HM003662

Recommended use of the chemical and restrictions on use

Recommended Use Additive

Uses Advised Against No information available

Supplier's name, address and phone number

Manufacturer/Supplier Halliburton Australia Pty. Ltd.

15 Marriott Road Jandakot WA 6164 Australia

ACN Number: 009 000 775

Telephone Number: + 61 1 800 686 951

Fax Number: 61 (08) 9455 5300

E-Mail address: fdunexchem@halliburton.com

Emergency phone number

+ 61 1 800 686 951

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

2. Hazard Identification

Statement of Hazardous Nature Non-Hazardous according to the criteria of the 3rd Revised Edition of the Globally

Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous

Goods according to the criteria of ADG.

Classification of the hazardous chemical

Not classified

Label elements, including precautionary statements

Hazard Pictograms

Signal Word Not Hazardous

Hazard Statements Not Classified

Precautionary Statements

PreventionNoneResponseNoneStorageNone

Contains

Disposal

Substances CAS Number

None

Contains no hazardous substances in concentrations above

cut-off values according to the competent authority

Other hazards which do not result in classification

None known

Australia Classification

For the full text of the H-phrases mentioned in this Section, see Section 16

Classification Not Classified

Risk Phrases None

3. Composition/information on Ingredients

NA

Substances	CAS Number	PERCENT (w/w)	GHS Classification - Australia
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not Applicable

4. First aid measures

Description of necessary first aid measures

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory

irritation develops or if breathing becomes difficult.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

Skin Wash with soap and water. Get medical attention if irritation persists.

Ingestion Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical

attention.

Symptoms caused by exposure

No significant hazards expected.

Medical Attention and Special Treatment

Notes to Physician Treat symptomatically

5. Fire Fighting Measures

Suitable extinguishing equipment

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

Specific hazards arising from the chemical

Special Exposure Hazards

Combustible dust when in finely divided and highly suspended state.

Special protective equipment and precautions for fire fighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Scoop up and remove.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Avoid creating or inhaling dust.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a dry location. Product has a shelf life of 60 months.

Other Guidelines

No information available

8. Exposure Controls/Personal Protection

Control parameters - exposure standards, biological monitoring

Exposure Limits

Substances	CAS Number	Australia NOHSC	ACGIH TLV-TWA
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable	Not applicable

Appropriate engineering controls

Engineering Controls A well ventilated area to control dust levels.

Personal protective equipment (PPE)

Respiratory ProtectionNot normally needed. But if significant exposures are possible then the following respirator

is recommended:

Dust/mist respirator. (N95, P2/P3)

Hand Protection Normal work gloves.

Skin Protection Normal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

Environmental Exposure Controls No information available

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Color: Dark gray

Odor: Odorless Odor Threshold: No information available

Property Values

Remarks/ - Method

pH: No data available Freezing Point/Range No data available Melting Point/Range No data available **Boiling Point/Range** No data available Flash Point No data available **Evaporation rate** No data available **Vapor Pressure** No data available Vapor Density No data available

Specific Gravity 2.25

Water Solubility Insoluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available **Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** No data available **Explosive Properties** No information available

Oxidizing Properties No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical Stability

Stable

10.3. Possibility of Hazardous Reactions

Will Not Occur

10.4. Conditions to Avoid

None anticipated

10.5. Incompatible Materials

Strong oxidizers.

10.6. Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on routes of exposure

Eye or skin contact, inhalation. **Principle Route of Exposure**

Sympotoms related to exposure

Most Important Symptoms/Effects

No significant hazards expected.

Numerical measures of toxicity

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

Immediate, delayed and chronic health effects from exposure

May cause mild respiratory irritation. Inhalation

May cause eye irritation. **Eye Contact** Skin Contact May cause mild skin irritation. May cause mild gastric distress. Ingestion

Chronic Effects/Carcinogenicity Prolonged, excessive exposure to dust may cause pneumoconiosis, a lung disease caused by inhaling dust particles less than 0.5 micrometers into the lungs.

Exposure Levels

No data available

Interactive effects

Skin disorders.

Data limitations

No data available

Substances	CAS Number	Skin corrosion/irritation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable.
Substances	CAS Number	Eye damage/irritation
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable.
Substances	CAS Number	Skin Sensitization
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable
Substances	CAS Number	Respiratory Sensitization
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable
Substances	CAS Number	Mutagenic Effects
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable
Substances	CAS Number	Carcinogenic Effects
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable
Substances	CAS Number	Reproductive toxicity
Contains no hazardous substances in concentrations above cut-off		Not applicable

GRAPHITE Revision Date: 29-Jan-2015 values according to the competent authority CAS Number STOT - single exposure Substances Contains no hazardous NΑ Not applicable substances in concentrations above cut-off values according to the competent authority Substances CAS Number STOT - repeated exposure Contains no hazardous NΑ Not applicable substances in concentrations above cut-off values according to the competent authority Substances CAS Number Aspiration hazard Contains no hazardous NA Not applicable substances in concentrations above cut-off values according to the competent authority 12. Ecological Information **Ecotoxicity Product Ecotoxicity Data** No data available **Substance Ecotoxicity Data** CAS Number **Toxicity to Algae Toxicity to Fish** Toxicity to Toxicity to Invertebrates Substances Microorganisms Contains no NA No information available No information available No information available No information available hazardous substances in concentrations above cut-off values according to the competent authority 12.2. Persistence and degradability CAS Number Substances Persistence and Degradability NΑ No information available Contains no hazardous substances in concentrations above cut-off values according to the competent authority 12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

Safe handling and disposal methods

Bury in a licensed landfill according to federal, state, and local regulations.

Disposal of any contaminated packaging

Follow all applicable national or local regulations.

Environmental regulations

Not applicable

14. Transport Information

Transportation Information

UN Number:
UN Proper Shipping Name:
Not restricted
Not restricted
Not applicable
Packing Group:
Not applicable
Environmental Hazards:
Not applicable

Special precautions during transport

None

HazChem Code

None Allocated

15. Regulatory Information

Safety, health and environmental regulations specific for the product

International Inventories

Australian AICS Inventory New Zealand Inventory of

All components listed on inventory or are exempt. All components listed on inventory or are exempt.

Chemicals EINECS Inventory

This product, and all its components, complies with EINECS

US TSCA Inventory
Canadian DSL Inventory

All components listed on inventory or are exempt. All components listed on inventory or are exempt.

Poisons Schedule number

None Allocated

16. Other information

Date of preparation or review

Revision Date: 29-Jan-2015

Revision Note

SDS sections updated: 2

Full text of R-phrases referred to under Sections 2 and 3

None

Full text of H-Statements referred to under sections 2 and 3

None

Additional information For additional information on the use of this product, contact your local Halliburton

representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key abreviations or acronyms used

bw – body weight CAS – Chemical Abstracts Service EC50 – Effective Concentration 50% LC50 – Lethal Concentration 50% LD50 – Lethal Dose 50% LL50 – Lethal Loading 50% mg/kg – milligram/kilogram mg/L – milligram/liter NOEC – No Observed Effect Concentration OEL – Occupational Exposure Limit PBT – Persistent Bioaccumulative and Toxic ppm – parts per million STEL – Short Term Exposure Limit TWA – Time-Weighted Average vPvB – very Persistent and very Bioaccumulative h - hour mg/m³ - milligram/cubic meter mm - millimeter mmHg - millimeter mercury w/w - weight/weight d - day

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet