

MATERIAL SAFETY DATA SHEET

Product Trade Name: **BAKER SECONDARY IGNITER (HLS)**

Revision Date: 03-Jan-2012

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: BAKER SECONDARY IGNITER (HLS)
Synonyms: None
Chemical Family: Not determined
Manufacturer/Supplier: Halliburton Energy Services
P.O. Box 1431
Duncan, Oklahoma 73536-0431
Emergency Telephone: (281) 575-5000

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Trade secret	Mixture	60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

Hazard Overview: Explosive.

4. FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. Destroy or properly dispose of contaminated shoes.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion Under normal conditions, first aid procedures are not required.

Notes to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (F):	896
Autoignition Temperature (C):	480
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

Fire Extinguishing Media Dry chemical.

Special Exposure Hazards Burns rapidly generating intense heat. Heat buildup may cause deflagration of bulk quantities. Sprinkler and/or deluge systems recommended for bulk storage areas.

Special Protective Equipment for Fire-Fighters Not Determined

NFPA Ratings: Health 0, Flammability 2, Reactivity 1
HMS Ratings: Not Determined

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Use only competent persons for cleanup.

Environmental Precautionary Measures None known.

Procedure for Cleaning / Absorption Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy.

7. HANDLING AND STORAGE

Handling Precautions Do NOT consume food, drink, or tobacco in contaminated areas.

Storage Information Keep away from friction, impact, and heat. Do NOT open shipping containers in bulk storage areas. Do NOT store with primary igniters or high explosives.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Dust/mist respirator. (95%)

Hand Protection Cloth gloves.

Skin Protection Cotton coveralls, undergarments, and socks. Conductive soled shoes. Anti-static clothing.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Not Determined

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Dark olive green
Odor:	Odorless
pH:	Not Determined

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity @ 20 C (Water=1):	Not Determined
Density @ 20 C (lbs./gallon):	Not Determined
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (F):	Not Determined
Freezing Point/Range (C):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Insoluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistrokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined

10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	May detonate with friction, impact, heat, and low level electrical current.
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure	Eye or skin contact, inhalation. Product does not present exposures health hazards during normal handling and use. However, this product is an explosive material and uncontrolled detonation may cause severe physical injury including death. All explosives are dangerous and must be handles carefully and used following approved safety procedures under the direction of competent, experience persons in accordance with all applicable regulations and ordinances.
Inhalation	May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Nitrogen oxides generated during use are irritating to the respiratory system.
Skin Contact	This product contains ingredients which may produce an allergic skin reaction. It should be treated as a skin sensitizer. Nitrogen oxides generated during use are skin irritants.
Eye Contact	May cause eye irritation.
Ingestion	May reduce blood's ability to transport oxygen.
Aggravated Medical Conditions	Blood disorders. Eye ailments.
Chronic Effects/Carcinogenicity	Not determined

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined
Dermal Toxicity: Not determined
Inhalation Toxicity: Not determined
Primary Irritation Effect: Not determined
Carcinogenicity Not determined
Genotoxicity: Not determined
**Reproductive /
Developmental Toxicity:** Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined
Persistence/Degradability Not applicable
Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined
Acute Crustaceans Toxicity: Not determined
Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined
Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal Method Disposal should be made in accordance with federal, state, and local regulations.
Contaminated Packaging Not determined

14. TRANSPORT INFORMATION

Land Transportation

DOT

UN0454, Igniters, 1.4S, II
EX-8703325
NAERG 114

Canadian TDG

Igniters, 1.4S, UN0454, II
EX-8703325

ADR

UN0454, Igniters, 1.4S, II
EX-8703325

Air Transportation

ICAO/IATA

UN0454, Igniters, 1.4S, II
EX-8703325

Sea Transportation

IMDG

UN0454, Igniters, 1.4S, II
EX-8703325
EmS F-B, S-X

Other Transportation Information

Labels: Explosive 1.4S

15. REGULATORY INFORMATION

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class Acute Health Hazard
Fire Hazard
Reactive Hazard

EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund Reportable Spill Quantity Not applicable.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:

Reactivity D003

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

16. OTHER INFORMATION**The following sections have been revised since the last issue of this MSDS**

Not applicable

Additional Information

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

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

Disclaimer Statement

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*****END OF MSDS*****