

MATERIAL SAFETY DATA SHEET

Product Trade Name: CORE GUN LOAD ASSEMBLY HIGH TEMP

Revision Date: 03-Jan-2013

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Dangerous Goods according to the criteria of ADG.

Manufacturer/Supplier Halliburton Australia Pty. Ltd.
15 Marriott Road
Jandakot
WA 6164
Australia

ACN Number: 009 000 775
Telephone Number: 61 (08) 9455 8300
Fax Number: 61 (08) 9455 5300

Product Emergency Telephone

Australia: 08-64244950
Papua New Guinea: 05 1 281 575 5000
New Zealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000
Papua New Guinea: 000
New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: CORE GUN LOAD ASSEMBLY HIGH TEMP
Synonyms: LOAD, ASSEMBLY, CORE, GUN, HI TEMP, 400 CRTG - 100004192
LOAD, ASSEMBLY, CORE, GUN, HI TEMP, 450 CRTG - 100004186
LOAD, ASSEMBLY, CORE, GUN, HI TEMP, 500 CRTG - 100004187
LOAD, ASSEMBLY, CORE, GUN, HI TEMP, 550 CRTG, OIL - 100071883
LOAD, ASSEMBLY, CORE, GUN, HI TEMP, 600 CRTG, OIL - 100142073

Chemical Family: Explosive
UN Number: , UN0278
Dangerous Goods Class: 1.4C
Subsidiary Risk: None
Hazchem Code: 2[Y]E
Poisons Schedule: None Allocated
Application: Explosive Charge

Prepared By Chemical Compliance
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Ammonium perchlorate	7790-98-9	77	Not applicable	Not applicable	Not applicable
Iron oxide	1309-37-1	3	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Aluminum	7429-90-5	20	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³	TWA: 1 mg/m ³

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview Explosive. May cause eye, skin, and respiratory irritation. May be harmful if swallowed. Oxidizer.

Risk Phrases R9 Explosive when mixed with combustible material.
R22 Harmful if swallowed.

HSNO Classification Not Determined

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

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media None. Contains both oxidizer and fuel and cannot be readily extinguished. Fire fighting should be limited to preventing the spread of other fires.

Extinguishing media which must not be used for safety reasons None known.

Special Exposure Hazards Oxidizer. May ignite combustibles. Delayed devices which may cook-off several hours after fire is out. Delayed column cannot be extinguished externally. Sprinkler and/or deluge systems recommended for bulk storage areas.

Special Protective Equipment for Fire-Fighters Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental Precautionary Measures Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption

Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Remove ignition sources and work with non-sparking tools. Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions

Only allow trained personnel to handle product.

Storage Information

Keep away from friction, impact, and heat. Observe storage compatibility groups and explosive limits.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use in a well ventilated area.

Respiratory Protection

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

Hand Protection

Cloth gloves.

Skin Protection

Cotton coveralls, undergarments, and socks. Conductive soled shoes.

Eye Protection

Wear safety glasses or goggles to protect against exposure.

Other Precautions

Handle remotely when possible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Metallic
Odor:	Odorless
pH:	Not Determined
Specific Gravity @ 20 C (Water=1):	Not Determined
Density @ 20 C (kg/l):	Not Determined
Bulk Density @ 20 C (kg/m³):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (C):	Not Determined
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (g/m³):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (g/m³):	Not Determined
Flammability Limits in Air - Upper (%):	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 (g/l):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined
Decomposition Temperature (C):	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. Strong acids.
Hazardous Decomposition Products	Shrapnel. Toxic fumes. Carbon monoxide and carbon dioxide. Oxides of nitrogen.
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.
<u>Symptoms related to exposure</u>	
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	May be absorbed through the skin and contribute to the symptoms listed under ingestion. Nitrogen oxides generated during use are skin irritants.
Eye Contact	May cause eye irritation.
Ingestion	Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.
Aggravated Medical Conditions	None known.
Chronic Effects/Carcinogenicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
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 Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

ADR

UN0278, Cartridges, Oil Well, 1.4C, II

EX-1985070014 EX-1985070015 EX-1985070016 EX-1985070017 EX-1985070018

Air Transportation

ICAO/IATA

UN0278, Cartridges, Oil Well, 1.4C, II

EX-1985070014 EX-1985070015 EX-1985070016 EX-1985070017 EX-1985070018

Sea Transportation

IMDG

UN0278, Cartridges, Oil Well, 1.4C, II

EX-1985070014 EX-1985070015 EX-1985070016 EX-1985070017 EX-1985070018

EmS F-B, S-X

Other Transportation Information

Labels: Explosive 1.4C

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory
New Zealand Inventory of Chemicals
US TSCA Inventory
EINECS Inventory

All components listed on inventory or are exempt.
This product does not comply with NZIOOC

All components listed on inventory or are exempt.
This product, and all its components, complies with EINECS

Classification

O - Oxidizing.
Xn - Harmful.

Risk Phrases

R9 Explosive when mixed with combustible material.
R22 Harmful if swallowed.

Safety Phrases

S2 Keep out of reach of children.
S16 Keep away from sources of ignition - No Smoking.
S33 Take precautionary measures against static discharges.
S34 Avoid shock and friction.

16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS

Not applicable

Contact

Australian Poisons Information Centre

24 Hour Service: - 13 11 26
Police or Fire Brigade: - 000 (exchange): - 1100

New Zealand National Poisons Centre

0800 764 766

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 Compliance at 1-580-251-4335.

Disclaimer Statement

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