

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** CL-30 CROSSLINKER

**Revision Date:** 29-Jul-2014

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

**Statement of Hazardous Nature** Non-Hazardous according to the criteria of NOHSC, Non-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  
NewZealand: 06-7559274

**Fire, Police & Ambulance - Emergency Telephone**

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

### Identification of Substances or Preparation

**Product Trade Name:** CL-30 CROSSLINKER  
**Synonyms:** None  
**Chemical Family:** Metal oxide  
**Dangerous Goods Class:** None  
**Subsidiary Risk:** None  
**Hazchem Code:** None Allocated  
**Poisons Schedule:** None Allocated  
**Application:** Crosslinker

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

## 2. HAZARDS IDENTIFICATION

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

**Hazard Overview** May cause mild eye, skin, and respiratory irritation.

<b>Classification</b>	None
<b>Risk Phrases</b>	None
<b>Safety Phrases</b>	None
<b>HSNO Classification</b>	Not Determined

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT (w/w)	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Magnesium oxide	1309-48-4	60 - 100%	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

**Non-Hazardous Substance to Total of 100%**

### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Skin</b>	Wash with soap and water. Get medical attention if irritation persists.
<b>Eyes</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
<b>Ingestion</b>	Under normal conditions, first aid procedures are not required.
<b>Notes to Physician</b>	Not Applicable

### 5. FIRE FIGHTING MEASURES

#### **Suitable Extinguishing Media**

All standard fire fighting media

#### **Extinguishing media which must not be used for safety reasons**

None known.

<b>Special Exposure Hazards</b>	Not applicable.
<b>Special Protective Equipment for Fire-Fighters</b>	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautionary Measures</b>	Use appropriate protective equipment. Avoid creating and breathing dust.
<b>Environmental Precautionary Measures</b>	Prevent from entering sewers, waterways, or low areas.
<b>Procedure for Cleaning / Absorption</b>	Scoop up and remove.

### 7. HANDLING AND STORAGE

<b>Handling Precautions</b>	Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.
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**Storage Information**

Store in a cool, dry location. Store in a cool well ventilated area. Product has a shelf life of 24 months.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls**

Use in a well ventilated area.

**Respiratory Protection**

If engineering controls and work practices cannot keep exposure below occupational exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, AS/NZS 1715:2009, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should be performed by an Industrial Hygienist or other qualified professional.  
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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Physical State:**

Powder

**Color:**

White

**Odor:**

Odorless

**pH:**

10.5

**Specific Gravity @ 20 C (Water=1):**

3.81

**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:**

0

**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):**

40.32

**Decomposition Temperature (C):**

Not Determined

**10. STABILITY AND REACTIVITY**

<b>Stability Data:</b>	Stable
<b>Hazardous Polymerization:</b>	Will Not Occur
<b>Conditions to Avoid</b>	None anticipated
<b>Incompatibility (Materials to Avoid)</b>	None known.
<b>Hazardous Decomposition Products</b>	None known.
<b>Additional Guidelines</b>	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

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

### Symptoms related to exposure

#### **Acute Toxicity**

<b>Inhalation</b>	May cause mild respiratory irritation.
<b>Eye Contact</b>	May cause mechanical irritation to eye.
<b>Skin Contact</b>	Prolonged or repeated contact may cause slight skin irritation.
<b>Ingestion</b>	None known

**Chronic Effects/Carcinogenicity** No data available to indicate product or components present at greater than 1% are chronic health hazards.

### Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Magnesium oxide	1309-48-4	3870 mg/kg	No data available	No data available

## 12. ECOLOGICAL INFORMATION

### **Ecotoxicological Information**

#### Ecotoxicity Product

<b>Acute Fish Toxicity:</b>	Not determined
<b>Acute Crustaceans Toxicity:</b>	Not determined
<b>Acute Algae Toxicity:</b>	Not determined

#### Ecotoxicity Substance

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Magnesium oxide	1309-48-4	No information available	No information available	No information available	TLM96: 665,500 ppm (Mysidopsis bahia) EC50(48h): 129.9 mg/L (Daphnia magna)

### 12.2. Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

Substances	Persistence and Degradability
Magnesium oxide	The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3. Bioaccumulative potential

Does not bioaccumulate

**12.4. Mobility in soil**  
No information available

**12.5. Results of PBT and vPvB assessment**  
No information available.

Substances	PBT and vPvB assessment
Magnesium oxide	Not PBT/vPvB

**12.6. Other adverse effects**

## 13. DISPOSAL CONSIDERATIONS

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

**Contaminated Packaging** Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Australia Dangerous Goods

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable

### IMDG/IMO

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable

### IATA/ICAO

**UN Number:** Not restricted.  
**UN Proper Shipping Name:** Not restricted  
**Transport Hazard Class(es):** Not applicable  
**Packing Group:** Not applicable

**Special Precautions for User:** None  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

## 15. REGULATORY INFORMATION

### Chemical Inventories

**Australian AICS Inventory** All components listed on inventory or are exempt.  
**New Zealand Inventory of Chemicals** All components listed on inventory or are exempt.  
**US TSCA Inventory** All components listed on inventory or are exempt.  
**EINECS Inventory** This product, and all its components, complies with EINECS

**Classification** Not Classified  
**Risk Phrases** None

**Safety Phrases** None

## 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\*\*\*