

**MATERIAL SAFETY DATA SHEET****Product Trade Name: DCA-17003****Revision Date:** 19-Dec-2013**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Trade Name:** DCA-17003  
**Synonyms:** None  
**Chemical Family:** Blend  
**Application:** Inhibitor

**Manufacturer/Supplier** Halliburton Energy Services  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Emergency Telephone: (281) 575-5000

**Prepared By** Chemical Compliance  
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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances	CAS Number	PERCENT (w/w)	ACGIH TLV-TWA	OSHA PEL-TWA
Aldol	107-89-1	30 - 60%	Not applicable	Not applicable
Crotonaldehyde	123-73-9	1 - 5%	Not applicable	2 ppm
Acetaldehyde	75-07-0	1 - 5%	25 ppm	200 ppm

**3. HAZARDS IDENTIFICATION**

**Hazard Overview** May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed. Potential carcinogen. Flammable.

**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.

**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** Not Applicable

## 5. FIRE FIGHTING MEASURES

Flash Point/Range (F):	65
Flash Point/Range (C):	18
Flash Point Method:	PMCC
Autoignition Temperature (F):	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined

**Fire Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Special Exposure Hazards** May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases.

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

**NFPA Ratings:** Health 2, Flammability 3, Reactivity 0  
**HMIS Ratings:** Health 2, Flammability 3, Reactivity 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

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

**Procedure for Cleaning / Absorption** Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Contain spill with sand or other inert materials. Scoop up and remove.

## 7. HANDLING AND STORAGE

**Handling Precautions** Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Storage Information** Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 36 months.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls** Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection** Organic vapor respirator.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron.

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

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State:	Liquid
Color:	Clear colorless to pale yellow
Odor:	Pungent
pH:	5-7
Specific Gravity @ 20 C (Water=1):	1.053
Density @ 20 C (lbs./gallon):	8.77
Bulk Density @ 20 C (lbs/ft3):	Not Determined
Boiling Point/Range (F):	212
Boiling Point/Range (C):	100
Freezing Point/Range (F):	-22
Freezing Point/Range (C):	-30
Vapor Pressure @ 20 C (mmHg):	0.1
Vapor Density (Air=1):	3.04
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Miscible
Solubility in Solvents (g/100ml):	Not Determined
VOCs (lbs./gallon):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	2-12
Viscosity, Kinematic @ 20 C (centistokes):	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	Keep away from heat, sparks and flame.
Incompatibility (Materials to Avoid)	Strong oxidizers. Strong alkalis. Strong acids.
Hazardous Decomposition Products	Oxides of nitrogen. Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

**11. TOXICOLOGICAL INFORMATION**

Principle Route of Exposure	Eye or skin contact, inhalation.
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**Symptoms related to exposure****Acute Toxicity****Inhalation**

Causes severe respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

**Eye Contact**

May cause severe eye irritation. May cause corneal injury.

**Skin Contact**

May be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause skin defatting with prolonged exposure. May cause skin irritation.

**Ingestion**

Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.

**Chronic Effects/Carcinogenicity**

This product contains a potential carcinogen.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aldol	107-89-1	2180 mg/kg ( Rat )	140 mg/kg ( Rabbit )	No data available
Crotonaldehyde	123-73-9	206 mg/kg ( Rat )	380 mg/kg ( Rabbit ) 380 µL/kg ( Rabbit )	85 ppm (Rat) 4 h 0.2 mg/L (Rat) 4 h 300 mg/m <sup>3</sup> (Rat) 4 h
Acetaldehyde	75-07-0	1930 mg/kg (Rat)	No data available	13300 ppm (Rat) 4 h

**12. ECOLOGICAL INFORMATION****Ecotoxicological Information****Ecotoxicity Product**

**Acute Fish Toxicity:** LC50(96hr): 237.1 mg/l (Scophthalmus maximus, Juvenile turbot)

**Acute Crustaceans Toxicity:** TLM48: 14.4 mg/l (Acartia tonsa)

**Acute Algae Toxicity:** EC50: 37.0 mg/l (Skeletonema costatum)

**Ecotoxicity Substance**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Aldol	107-89-1	No information available	No information available	No information available	No information available
Crotonaldehyde	123-73-9	No information available	No information available	No information available	No information available
Acetaldehyde	75-07-0	No information available	No information available	No information available	No information available

**12.2 Persistence and degradability**

No information available

**12.3 Bioaccumulative potential**

No information available

**12.4 Mobility in soil**

No information available

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Other adverse effects****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****DOT**

UN1992, Flammable Liquid, Toxic, N.O.S. (Contains Acetaldehyde, Aldol) , 3 , (6.1) , II , (18.3 C)  
NAERG 131

**Canadian TDG**

Flammable Liquid, Toxic, N.O.S. (Contains Acetaldehyde, Aldol) , 3 , (6.1) , UN1992 , II , (18.3 C)

**ADR**

UN1992, Flammable Liquid, Toxic, N.O.S (Contains Acetaldehyde, Aldol) , 3 , (6.1) , II

**Air Transportation****ICAO/IATA**

UN1992, Flammable Liquid, Toxic, N.O.S , 3 , (6.1) , II (Contains Acetaldehyde, Aldol)

**Sea Transportation****IMDG**

UN1992, Flammable Liquid, Toxic, N.O.S (Contains Acetaldehyde, Aldol) , 3 , (6.1) , II , (18.3 C)  
EmS F-E, S-D

**Other Transportation Information**

**Labels:** Flammable Liquid  
Toxic

<b>15. REGULATORY INFORMATION</b>
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**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  
Chronic Health Hazard  
Fire Hazard

**EPA SARA (313) Chemicals** This product contains toxic chemical(s) listed below which is(are) subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372:  
Acetaldehyde//75-07-0

**EPA CERCLA/Superfund Reportable Spill Quantity** EPA Reportable Spill Quantity is 228 Gallons based on Crotonaldehyde (CAS: 123-73-9).

**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:  
  
Ignitability D001

**California Proposition 65** The California Proposition 65 regulations apply to this product.

**MA Right-to-Know Law** One or more components listed.

**NJ Right-to-Know Law** One or more components listed.

**PA Right-to-Know Law** One or more components listed.

## **Canadian Regulations**

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

**WHMIS Hazard Class**  
B2 Flammable Liquids  
D1A Very Toxic Materials  
D2A Very Toxic Materials  
E Corrosive Material

## **16. OTHER INFORMATION**

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

Not applicable

**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.

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