

## SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

### DCA-25001

Revision Date: 19-Oct-2015

Revision Number: 7

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product Identifier

Product Name DCA-25001  
Internal ID Code HM007668

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Recommended Use</b>	Liquid Gel Concentrate
<b>Sector of use</b>	SU2 - Mining, (including offshore industries)
<b>Product category</b>	PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents
<b>Process categories</b>	PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises

##### 1.3. Details of the supplier of the safety data sheet

Halliburton Energy Services  
Halliburton House, Howemoss Place  
Kirkhill Industrial Estate  
Dyce  
Aberdeen, AB21 0GN  
United Kingdom

[www.halliburton.com](http://www.halliburton.com)

For further information, please contact

**E-Mail address:** [fdunexchem@halliburton.com](mailto:fdunexchem@halliburton.com)

**1.4. Emergency telephone number**  
+44 8 08 189 0979 / 1-760-476-3961

Emergency telephone - §45 - (EC)1272/2008	
Europe	112
Croatia	Centar za kontrolu otrovanja (CKO): (+385 1) 23-48-342 (Poison Control Center (PCC) - Institute for Medical Research and Occupational Health)
Cyprus	+210 7793777
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO): + 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Romania	+40 21 318 36 06
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

#### SECTION 2: Hazards Identification

##### 2.1. Classification of the substance or mixture

**REGULATION (EC) No 1272/2008** - H304

Skin Corrosion / irritation	Category 2 - H315
Specific Target Organ Toxicity - (Single Exposure)	Category 3 - H336
Chronic Aquatic Toxicity	Chronic 2 - H411

**2.2. Label Elements****Hazard Pictograms****Signal Word****Danger****Hazard Statements**

H315 - Causes skin irritation

H336 - May cause drowsiness and dizziness

H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements - EU (§28, 1272/2008)**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P501 - Dispose of contents/container to an approved waste disposal plant

**Contains****Substances**

Heavy aliphatic naphtha

Alcohols, C10-12, ethoxylated

**CAS Number**

64742-96-7

67254-71-1

**2.3. Other Hazards**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**SECTION 3: Composition/information on Ingredients****3.2. Mixtures**

Mixture

Substances	EINECS	CAS Number	PERCENT (w/w)	EU - CLP Substance Classification	REACH No.
Heavy aliphatic naphtha	265-200-4	64742-96-7	30 - 60%	Skin Irrit. 2 (H315) STOT SE 3 (H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)	No data available
Alcohols, C10-12, ethoxylated	Not applicable	67254-71-1	0.1 - 1%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	No data available

**For the full text of the H-phrases mentioned in this Section, see Section 16****SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

If inhaled, move victim to fresh air and seek medical attention.

**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**

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

<b>Ingestion</b>	laundry before reuse. Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.
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#### 4.2. Most Important symptoms and effects, both acute and delayed

Causes skin irritation. May cause headache, dizziness, and other central nervous system effects.

**4.3. Indication of any immediate medical attention and special treatment needed**

Notes to Physician	Treat symptomatically
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## SECTION 5: Firefighting Measures

### 5.1. Extinguishing media

### Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam.

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

None known.

## 5.2. Special hazards arising from the substance or mixture

### Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed water containers may explode in fire. Decomposition in fire may produce harmful gases.

### 5.3. Advice for firefighters

## Special Protective Equipment for Fire-Fighters

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Remove sources of ignition. Use appropriate protective equipment. Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Evacuate all persons from the area.

See Section 8 for additional information

## 6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

### 6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

#### 6.4. Reference to other sections

See Section 8 and 13 for additional information.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling

Remove sources of ignition. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 7.2. Conditions for safe storage, including any incompatibilities

Store away from oxidizers. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 24 months.

### 7.3. Specific End Use(s)

Exposure Scenario	No information available
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<b>Other Guidelines</b>	No information available
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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

## Exposure Limits

Substances	CAS Number	EU	UK	Netherlands	France
Heavy aliphatic naphtha	64742-96-7	Not applicable	Not applicable	Not applicable	Not applicable

Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable	Not applicable	Not applicable	Not applicable
<b>Substances</b>	<b>CAS Number</b>	<b>Germany</b>	<b>Spain</b>	<b>Portugal</b>	<b>Finland</b>
Heavy aliphatic naphtha	64742-96-7	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable	Not applicable	Not applicable	Not applicable
<b>Substances</b>	<b>CAS Number</b>	<b>Austria</b>	<b>Ireland</b>	<b>Switzerland</b>	<b>Norway</b>
Heavy aliphatic naphtha	64742-96-7	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable	Not applicable	Not applicable	Not applicable
<b>Substances</b>	<b>CAS Number</b>	<b>Italy</b>	<b>Poland</b>	<b>Hungary</b>	<b>Czech Republic</b>
Heavy aliphatic naphtha	64742-96-7	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable	Not applicable	Not applicable	Not applicable
<b>Substances</b>	<b>CAS Number</b>	<b>Denmark</b>	<b>Romania</b>	<b>Croatia</b>	<b>Cyprus</b>
Heavy aliphatic naphtha	64742-96-7	Not applicable	Not applicable	Not applicable	Not applicable
Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable	Not applicable	Not applicable	Not applicable

**Derived No Effect Level (DNEL)**  
**Worker**

No information available.

**General Population**

**Predicted No Effect Concentration (PNEC)**

No information available.

**8.2. Exposure controls**

**Engineering Controls**

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

**Personal protective equipment**

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

**Respiratory Protection**

Not normally needed. But if significant exposures are possible then the following respirator is recommended:

**Hand Protection**

Organic vapor respirator with a dust/mist filter. (A2P2/P3)

**Skin Protection**

Impervious rubber gloves.

**Eye Protection**

Normal work coveralls.

**Other Precautions**

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

Eyewash fountains and safety showers must be easily accessible.

**Environmental Exposure Controls** Do not allow material to contaminate ground water system

## SECTION 9: Physical and Chemical Properties

**9.1. Information on basic physical and chemical properties**

**Physical State:** Liquid

**Color:** Off white

**Odor:** Mild hydrocarbon

**Odor Threshold:** No information available

Property

Values

Remarks/ - Method

**pH:**

6.5 - 7.5

**Freezing Point/Range**

No data available

**Melting Point/Range**

No data available

**Boiling Point/Range**

200 °C / 392 °F

**Flash Point**

82 °C / 180 °F Cleveland closed cup

**Flammability (solid, gas)**

No data available

upper flammability limit

No data available

lower flammability limit

No data available

**Evaporation rate**

No data available

**Vapor Pressure**

No data available

Vapor Density	No data available
Specific Gravity	No data available
Water Solubility	Soluble 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
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## SECTION 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**

Keep away from heat, sparks and flame.

**10.5. Incompatible Materials**

Strong oxidizers.

**10.6. Hazardous Decomposition Products**

Carbon monoxide and carbon dioxide.

## SECTION 11: Toxicological Information

**11.1. Information on Toxicological Effects****Acute Toxicity****Inhalation**

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

**Eye Contact**

May cause mild eye irritation.

**Skin Contact**

Causes skin irritation. Causes drying of the skin.

**Ingestion**

Irritation of the mouth, throat, and stomach. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions.

**Chronic Effects/Carcinogenicity**

The full refining history is known and it can be shown that the production substance is not carcinogen, therefore the classification as a carcinogen need not apply.

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Heavy aliphatic naphtha	64742-96-7	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	5.28 mg/L (Rat) 4h 7.5 mg/L (Rat) 6h
Alcohols, C10-12, ethoxylated	67254-71-1	1600 mg/kg (Rat) (similar substance) > 5000 mg/kg (Rat) (similar substance)	>2000 mg/kg (Rat) (similar substance) 2500 mg/kg (Rabbit) (similar substance)	No data available

Substances	CAS Number	Skin corrosion/irritation
Heavy aliphatic naphtha	64742-96-7	Irritating to skin. (Rabbit)
Alcohols, C10-12, ethoxylated	67254-71-1	Causes moderate skin irritation. (Rabbit) (similar substances)

Substances	CAS Number	Eye damage/irritation
Heavy aliphatic naphtha	64742-96-7	Non-irritating to the eye (Rabbit)
Alcohols, C10-12,	67254-71-1	Causes severe eye irritation which may damage tissue. (Rabbit) (similar substances)

ethoxylated		
Substances	CAS Number	Skin Sensitization
Heavy aliphatic naphtha	64742-96-7	Did not cause sensitization on laboratory animals (guinea pig)
Alcohols, C10-12, ethoxylated	67254-71-1	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Substances	CAS Number	Respiratory Sensitization
Heavy aliphatic naphtha	64742-96-7	No information available
Alcohols, C10-12, ethoxylated	67254-71-1	No information available
Substances	CAS Number	Mutagenic Effects
Heavy aliphatic naphtha	64742-96-7	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Alcohols, C10-12, ethoxylated	67254-71-1	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Substances	CAS Number	Carcinogenic Effects
Heavy aliphatic naphtha	64742-96-7	Did not show carcinogenic effects in animal experiments
Alcohols, C10-12, ethoxylated	67254-71-1	Did not show carcinogenic effects in animal experiments (similar substances)
Substances	CAS Number	Reproductive toxicity
Heavy aliphatic naphtha	64742-96-7	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.
Alcohols, C10-12, ethoxylated	67254-71-1	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Substances	CAS Number	STOT - single exposure
Heavy aliphatic naphtha	64742-96-7	May cause headache, dizziness, and other central nervous system effects.
Alcohols, C10-12, ethoxylated	67254-71-1	No significant toxicity observed in animal studies at concentration requiring classification.
Substances	CAS Number	STOT - repeated exposure
Heavy aliphatic naphtha	64742-96-7	No significant toxicity observed in animal studies at concentration requiring classification.
Alcohols, C10-12, ethoxylated	67254-71-1	No significant toxicity observed in animal studies at concentration requiring classification.
Substances	CAS Number	Aspiration hazard
Heavy aliphatic naphtha	64742-96-7	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Alcohols, C10-12, ethoxylated	67254-71-1	Not applicable

## SECTION 12: Ecological Information

### 12.1. Toxicity Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Heavy aliphatic naphtha	64742-96-7	EL50 (72h) 1-3 mg/L (Pseudokirchnerella subcapitata)	LL50 (96h) 2 - 5 mg/L (Oncorhynchus mykiss)	No information available	EL50 (48h) 21 mg/L (Daphnia magna) EL50 (48h) 1.4 mg/L (Daphnia magna) NOEL (21d) 0.48 mg/L (Daphnia magna) (similar substance)
Alcohols, C10-12, ethoxylated	67254-71-1	EC50 (96h) 0.7 mg/L (Selenastrum capricornutum)	LC50 (96h) 6.4 mg/L (Lepomis macrochirus) LC50 (96h) 1.4 mg/L	No information available	EC50 (48h) 0.39 mg/L (Ceriodaphnia dubia)

			(Pimephales promelas) NOEC (16d) 0.16 mg/L (Lepomis macrochirus) NOEC (30d) 0.28 mg/L (Pimephales promelas)		
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**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Heavy aliphatic naphtha	64742-96-7	Readily biodegradable (58.6% @ 28d)
Alcohols, C10-12, ethoxylated	67254-71-1	Readily biodegradable (72% @ 28d)

**12.3. Bioaccumulative potential**

Substances	CAS Number	Log Pow
Heavy aliphatic naphtha	64742-96-7	No information available
Alcohols, C10-12, ethoxylated	67254-71-1	No information available

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Heavy aliphatic naphtha	64742-96-7	No information available
Alcohols, C10-12, ethoxylated	67254-71-1	No information available

**12.5. Results of PBT and vPvB assessment**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Substances	PBT and vPvB assessment
Heavy aliphatic naphtha	Not PBT/vPvB
Alcohols, C10-12, ethoxylated	Not PBT/vPvB

**12.6. Other adverse effects****Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors

<b>SECTION 13: Disposal Considerations</b>
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**13.1. Waste treatment methods****Disposal Method**

Disposal should be made in accordance with federal, state, and local regulations.

**Contaminated Packaging**

Follow all applicable national or local regulations.

<b>SECTION 14: Transport Information</b>
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**IMDG/IMO**

UN Number: UN3082  
 UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Petroleum Naphtha)  
 Transport Hazard Class(es): 9  
 Packing Group: III  
 Environmental Hazards: Marine Pollutant

**RID**

UN Number: UN3082  
 UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Petroleum Naphtha)  
 Transport Hazard Class(es): 9  
 Packing Group: III  
 Environmental Hazards: Marine Pollutant

**ADR**

UN Number: UN3082  
 UN Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Petroleum Naphtha)  
 Transport Hazard Class(es): 9  
 Packing Group: III  
 Environmental Hazards: Marine Pollutant

**IATA/ICAO**

<b>UN Number:</b>	UN3082
<b>UN Proper Shipping Name:</b>	Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Petroleum Naphtha)
<b>Transport Hazard Class(es):</b>	9
<b>Packing Group:</b>	III
<b>Environmental Hazards:</b>	Marine Pollutant

**14.1. UN Number:** UN3082

**14.2. UN Proper Shipping Name:** Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Petroleum Naphtha)

**14.3. Transport Hazard Class(es):** 9

**14.4. Packing Group:** III

**14.5. Environmental Hazards:** Marine Pollutant

**14.6. Special Precautions for User:** None

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

## SECTION 15: Regulatory Information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Inventories

<b>EINECS Inventory</b>	This product, and all its components, complies with EINECS
<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>Canadian DSL Inventory</b>	Product contains one or more components not listed on the inventory.

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**Germany, Water Endangering Classes (WGK)** Not determined.

### 15.2. Chemical Safety Assessment

No information available

## SECTION 16: Other Information

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

H302 - Harmful if swallowed  
 H304 - May be fatal if swallowed and enters airways  
 H315 - Causes skin irritation  
 H318 - Causes serious eye damage  
 H336 - May cause drowsiness or dizziness  
 H400 - Very toxic to aquatic life  
 H411 - Toxic to aquatic life with long lasting effects  
 H412 - Harmful to aquatic life with long lasting effects

### **Key or legend to abbreviations and acronyms**

bw – body weight  
 CAS – Chemical Abstracts Service  
 CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures  
 EC – European Commission  
 EC10 – Effective Concentration 10%  
 EC50 – Effective Concentration 50%  
 EEC – European Economic Community  
 ErC50 – Effective Concentration growth rate 50%  
 IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 LC50 – Lethal Concentration 50%  
 LD50 – Lethal Dose 50%  
 LL0 – Lethal Loading 0%  
 LL50 – Lethal Loading 50%



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MARPOL – International Convention for the Prevention of Pollution from Ships

mg/kg – milligram/kilogram

mg/L – milligram/liter

NIOSH – National Institute for Occupational Safety and Health

NOEC – No Observed Effect Concentration

NTP – National Toxicology Program

OEL – Occupational Exposure Limit

PBT – Persistent Bioaccumulative and Toxic

PC – Chemical Product category

PEL – Permissible Exposure Limit

ppm – parts per million

PROC – Process category

REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL – Short Term Exposure Limit

SU – Sector of Use category

#### **Key literature references and sources for data**

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

**Revision Date:** 19-Oct-2015

#### **Revision Note**

SDS sections updated: 2

**This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010**

#### **Disclaimer Statement**

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**End of Safety Data Sheet**