

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

DCA-17002

Revision Date: 24-Sep-2015

Revision Number: 11

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

1.1. Product Identifier

Product Name DCA-17002
Internal ID Code HM007693

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

Recommended Use Corrosion Inhibitor

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

For further information, please contact

E-Mail address: 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

Acute Oral Toxicity	Category 3 - H301
Acute Toxicity - Dermal	Category 3 - H311
Acute Inhalation Toxicity - Vapors	Category 3 - H331
Skin Corrosion / irritation	Category 1 B - H314
Serious Eye Damage / Eye Irritation	Category 1 - H318
Specific Target Organ Toxicity - (Single Exposure)	Category 1 - H370
Acute Aquatic Toxicity	Acute 1 - H400

Chronic Aquatic Toxicity	Chronic 3 - H412
Flammable liquids.	Category 2 - H225

2.2. Label Elements

Hazard Pictograms



Signal Word

Danger

Hazard Statements

H225 - Highly flammable liquid and vapor
H301 - Toxic if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H331 - Toxic if inhaled
H370 - Causes damage to organs
H400 - Very toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

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

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Contains

Substances

Methanol
Alcohols, C14-C15, ethoxylated
Thiourea, polymer with formaldehyde and 1-phenylethanone
Propargyl alcohol
Alkenes, C >10 alpha-

CAS Number

67-56-1
68951-67-7
68527-49-1
107-19-7
64743-02-8

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.
Methanol	200-659-6	67-56-1	30 - 60%	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370) Flam. Liq. 2 (H225)	01-2119433307-44
Alcohols, C14-C15, ethoxylated	Not applicable	68951-67-7	10 - 30%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315)	No data available

				Eye Corr. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412)	
Thiourea, polymer with formaldehyde and 1-phenylethanone	271-363-2	68527-49-1	10 - 30%	Acute Tox. 4 (H302) Eye Corr. 1 (H318) Aquatic Chronic 2 (H411)	No data available
Propargyl alcohol	203-471-2	107-19-7	5 - 10%	Acute Tox. 3 (H301) Acute Tox. 2 (H310) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Eye Corr. 1 (H318) STOT RE 2 (H373) Aquatic Chronic 2 (H411) Flam. Liq. 3 (H226)	No data available
Alkenes, C >10 alpha-	265-207-2	64743-02-8	1 - 5%	Asp. Tox. 1 (H304)	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	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Eyes	Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.
Skin	In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
Ingestion	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

4.2. Most Important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Prolonged or repeated exposure may cause damage to organs.

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

Notes to Physician Treat symptomatically

SECTION 5: Firefighting Measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

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

May be ignited by heat, sparks or flames. Decomposition in fire may produce harmful gases. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Avoid spraying water directly into storage containers due to danger of boilover. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

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. Wear self-contained breathing apparatus in enclosed areas. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. 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. Remove ignition sources and work with non-sparking tools. 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. Use appropriate protective equipment. Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

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. 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

Other Guidelines

No information available

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Exposure Limits

Substances	CAS Number	EU	UK	Netherlands	France
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm TWA: 266 mg/m ³ STEL: 250 ppm STEL: 333 mg/m ³	TWA: 133 mg/m ³ TWA: 100 ppm	200 ppm
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable	Not applicable	Not applicable	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable	Not applicable	Not applicable	Not applicable
Propargyl alcohol	107-19-7	Not applicable	TWA: 1 ppm TWA: 2.3 mg/m ³ STEL: 3 ppm STEL: 7 mg/m ³	0,25 ppm	1 ppm
Alkenes, C >10 alpha-	64743-02-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Methanol	67-56-1	TWA: 200 ppm TWA: 270 mg/m ³ Peak: 800 ppm Peak: 1080 mg/m ³	TWA: 200 ppm TWA: 266 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm	TWA: 200 ppm TWA: 270 mg/m ³ STEL: 250 ppm STEL: 330 mg/m ³
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable	Not applicable	Not applicable	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable	Not applicable	Not applicable	Not applicable
Propargyl alcohol	107-19-7	TWA: 2 ppm TWA: 4.7 mg/m ³	TWA: 1 ppm TWA: 2.3 mg/m ³	TWA: 1 ppm	TWA: 1 ppm TWA: 2.3 mg/m ³ STEL: 3 ppm STEL: 7 mg/m ³
Alkenes, C >10 alpha-	64743-02-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	200 ppm TWA; 260 mg/m ³ TWA	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 100 ppm TWA: 130 mg/m ³

		STEL" 800 ppm STEL" 1040 mg/m ³	600 ppm STEL (calculated); 780 mg/m ³ STEL (calculated)	STEL: 800 ppm STEL: 1040 mg/m ³	STEL: 100 ppm STEL: 130 mg/m ³
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable	Not applicable	Not applicable	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable	Not applicable	Not applicable	Not applicable
Propargyl alcohol	107-19-7	TWA: 2 ppm TWA: 4.7 mg/m ³ STEL" 4 ppm STEL" 9.4 mg/m ³	1 ppm TWA; 2 mg/m ³ TWA 6 mg/m ³ STEL (dust and fume); 3 ppm STEL	TWA: 2 ppm TWA: 4.7 mg/m ³ STEL: 4 ppm STEL: 9.4 mg/m ³	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 5 mg/m ³
Alkenes, C >10 alpha-	64743-02-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 100 mg/m ³ STEL: 300 mg/m ³	TWA: 260 mg/m ³	TWA: 250 mg/m ³
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable	Not applicable	Not applicable	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable	Not applicable	Not applicable	Not applicable
Propargyl alcohol	107-19-7	Not applicable	TWA: 3 mg/m ³	Not applicable	Not applicable
Alkenes, C >10 alpha-	64743-02-8	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Methanol	67-56-1	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 5 ppm	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable	Not applicable	Not applicable	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable	Not applicable	Not applicable	Not applicable
Propargyl alcohol	107-19-7	TWA: 1 ppm TWA: 2.5 mg/m ³	Not applicable	TWA: 1 ppm TWA: 2.3 mg/m ³ STEL: 3 ppm STEL: 7 mg/m ³	Not applicable
Alkenes, C >10 alpha-	64743-02-8	Not applicable	Not applicable	Not applicable	Not applicable

Derived No Effect Level (DNEL)

No information available.

Worker

Substances	Long-term exposure - systemic effects, Inhalation	Acute / short term exposure - systemic effects, Inhalation	Long-term exposure - local effects, Inhalation	Acute / short term exposure - local effects, Inhalation	Long-term exposure - systemic effects, Dermal	Acute / short term exposure - systemic effects, Dermal	Long-term exposure - local effects, Dermal	Acute / short term exposure - local effects, Dermal	Hazards for the eyes - local effects
Methanol	260 mg/m ³	260 mg/m ³	260 mg/m ³	260 mg/m ³	40 mg/kg bw/day	40 mg/kg bw/day	Low hazard (no threshold derived)	Low hazard (no threshold derived)	Low hazard (no threshold derived)

General Population

Substances	Long-term exposure - systemic effects, Inhalation	Acute / short term exposure - systemic effects, Inhalation	Long-term exposure - local effects, Inhalation	Acute / short term exposure - local effects, Inhalation	Long-term exposure - systemic effects, Dermal	Acute / short term exposure - systemic effects, Dermal	Long-term exposure - local effects, Dermal	Acute / short term exposure - local effects, Dermal	Long-term exposure - systemic effects, Oral	Acute / short term exposure - local effects, Oral	Hazards for the eyes - local effects
Methanol	50 mg/m ³	50 mg/m ³	50 mg/m ³	50 mg/m ³	8 mg/kg bw/day	8 mg/kg bw/day	Low hazard (no threshold derived)	Low hazard (no threshold derived)	Other toxicological threshold	Other toxicological threshold	Low hazard (no threshold derived)

Predicted No Effect Concentration (PNEC)

No information available.

Substances	Freshwater	Marine water	Intermittent release	Sewage treatment plant	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Secondary poisoning
Methanol	20.8 mg/L	2.08 mg/L	1540 mg/L	100 mg/L	77 mg/kg sediment dw	7.7 mg/kg sediment dw	Not available	3.18 mg/kg soil dw	Not 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

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. Positive pressure self-contained breathing apparatus if methanol is released.

Hand Protection

Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Butyl rubber gloves. (>= 0.7 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced. Manufacturer's directions for use should be observed because of great diversity of types.

Skin Protection

Full protective chemical resistant clothing.

Eye Protection

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

Other Precautions

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: Clear amber

Odor: Alcohol

Odor Threshold: No information available

PropertyValuesRemarks/ - Method**pH:**

4 - 6

Freezing Point/Range

-29 °C

Melting Point/Range

No data available

Boiling Point/Range

No data available

Flash Point

< 11 °C / < 52 °F PMCC

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

> 1

Specific Gravity

0.89

Water Solubility

Dispersible

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

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. Avoid contact with acids. Avoid contact with oxidizers.

10.5. Incompatible Materials

Strong oxidizers. Strong acids. Strong alkalis.

10.6. Hazardous Decomposition Products

Oxides of sulfur. Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

Inhalation

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

Eye Contact

Causes severe eye burns.

Skin Contact

Causes burns. Toxic in contact with skin. May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.

Ingestion

Causes burns of the mouth, throat and stomach. Toxic if swallowed. 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

Prolonged or repeated exposure may cause eye, blood, lung, liver, kidney, heart, central nervous system and spleen damage.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methanol	67-56-1	< 790 mg/kg (rat) mg/kg (mouse) mg/kg (rabbit) mg/kg (Human) 6200 mg/kg (Rat)	15800 mg/kg (Rabbit) mg/kg bw (primates) mg/kg (Human) 15800 mg/kg (Rabbit)	10 mg/L (Human) 4h (vapor) 22,500 ppm (Rat) 8h 64,000 ppm (Rat) 4h mg/L (rat) 4h 128.8 mg/L (rat) 4h
Alcohols, C14-C15, ethoxylated	68951-67-7	1600 mg/kg (Rat) (similar substance)	> 2000 mg/kg (Rat) (similar substance)	> 0.22 mg/L (Rat, 4h, vapor) (saturation)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No data available	No data available	No data available
Propargyl alcohol	107-19-7	20 mg/kg (Rat) 20-50 mg/kg (Rat) 93-110 mg/kg (Rat) 54-55 mg/kg (Rat) 56.4 mg/kg (Rat) 145 mg/kg (Rat)	16 mg/kg (Rabbit) 88 mg/kg (Rabbit)	600 mg/L (Rat) 4h 520 mg/L (Rat) 4h 1.6 mg/L (Rat) 2h 1040 mg/L (Rat) 1h
Alkenes, C >10 alpha-	64743-02-8	>5050 mg/kg (Rat) (similar substance) >10,000 mg/kg (Rat) (similar substance)	>10,000 mg/kg (Rabbit) (similar substance)	3.69 mg/L (Rat) 4h (similar substance) >2.1 mg/L (Rat) (similar substance)

Substances	CAS Number	Skin corrosion/irritation
Methanol	67-56-1	Non-irritating to the skin (Rabbit)
Alcohols, C14-C15, ethoxylated	68951-67-7	Causes moderate skin irritation. (Rabbit) (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Non-irritating to the skin
Propargyl alcohol	107-19-7	Corrosive to skin (Rabbit)
Alkenes, C >10 alpha-	64743-02-8	Not irritating to skin in rabbits. (similar substances)

Substances	CAS Number	Eye damage/irritation
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Methanol	67-56-1	Non-irritating to the eye (Rabbit)
Alcohols, C14-C15, ethoxylated	68951-67-7	Causes severe eye irritation which may damage tissue. (Rabbit) (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Causes severe eye irritation.
Propargyl alcohol	107-19-7	Corrosive to eyes (Rabbit)
Alkenes, C >10 alpha-	64743-02-8	Non-irritating to rabbit's eye (similar substances)

Substances	CAS Number	Skin Sensitization
Methanol	67-56-1	Did not cause sensitization on laboratory animals (guinea pig)
Alcohols, C14-C15, ethoxylated	68951-67-7	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	No information available
Alkenes, C >10 alpha-	64743-02-8	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
Methanol	67-56-1	No information available
Alcohols, C14-C15, ethoxylated	68951-67-7	No information available
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	No information available
Alkenes, C >10 alpha-	64743-02-8	No information available

Substances	CAS Number	Mutagenic Effects
Methanol	67-56-1	The weight of evidence from available in vitro and in vivo studies indicates that this substance is not expected to be mutagenic.
Alcohols, C14-C15, ethoxylated	68951-67-7	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Alkenes, C >10 alpha-	64743-02-8	Not regarded as mutagenic. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Methanol	67-56-1	No data of sufficient quality are available.
Alcohols, C14-C15, ethoxylated	68951-67-7	Did not show carcinogenic effects in animal experiments (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available.
Propargyl alcohol	107-19-7	Did not show carcinogenic effects in animal experiments
Alkenes, C >10 alpha-	64743-02-8	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Methanol	67-56-1	Experiments have shown reproductive toxicity effects on laboratory animals
Alcohols, C14-C15, ethoxylated	68951-67-7	Animal testing did not show any effects on fertility. (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	No significant toxicity observed in animal studies at concentration requiring classification.
Alkenes, C >10 alpha-	64743-02-8	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
Methanol	67-56-1	May cause disorder and damage to the Central Nervous System (CNS)
Alcohols, C14-C15, ethoxylated	68951-67-7	No data of sufficient quality are available.
Thiourea, polymer with formaldehyde and	68527-49-1	No information available

1-phenylethanone		
Propargyl alcohol	107-19-7	No significant toxicity observed in animal studies at concentration requiring classification.
Alkenes, C >10 alpha-	64743-02-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	STOT - repeated exposure
Methanol	67-56-1	No data of sufficient quality are available.
Alcohols, C14-C15, ethoxylated	68951-67-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	Causes damage to organs through prolonged or repeated exposure if swallowed: Causes damage to organs through prolonged or repeated exposure if inhaled: (Liver) (Kidney) (Blood)
Alkenes, C >10 alpha-	64743-02-8	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)

Substances	CAS Number	Aspiration hazard
Methanol	67-56-1	Not applicable
Alcohols, C14-C15, ethoxylated	68951-67-7	Not applicable
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	Not applicable
Propargyl alcohol	107-19-7	Not applicable
Alkenes, C >10 alpha-	64743-02-8	Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

SECTION 12: Ecological Information

12.1. Toxicity Ecotoxicity Effects

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Methanol	67-56-1	ErC50 (96h) 22000 mg/L (Pseudokirchnerella subcapitata)	LC50 28200 mg/L (Pimephales promelas) LC50 (96h) 12700 – 15400 mg/L (Lepomis macrochirus)	IC50 (3h) > 1000 mg/L (activated sludge)	EC50 (96h) 18260 mg/L (Daphnia magna) NOEC (21d) 122 mg/L (Daphnia magna, Reproduction)
Alcohols, C14-C15, ethoxylated	68951-67-7	EC50 (96h) 0.1 mg/L (Selenastrum capricornutum)	LC50 (96h) 1 mg/L (Pimephales promelas) NOEC (30d) 0.28 mg/L (Pimephales promelas) NOEC (16d) 0.1 mg/L (Lepomis macrochirus)	No information available	EC50 (48h) 1.2 mg/L (Daphnia Magna)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available	No information available	No information available	No information available
Propargyl alcohol	107-19-7	EC50 (72h) > 98.1 mg/L (Desmodesmus subspicatus) (biomass and growth rate)	LC50 1.49-1.56 mg/L (Pimephales promelas) LC50 (96h) 1.53 mg/L (Pimephales promelas)	EC50 (30 min) > 1000 mg/L (Activated sludge, domestic)	EC50 32 mg/L (Daphnia magna) EC50 (48h) 3.36 mg/L (Daphnia magna)
Alkenes, C >10 alpha-	64743-02-8	NOELr (72h) 1000 mg/L (Pseudokirchneriella subcapitata) (similar substance)	LL50 (96h) >1000 mg/L (Oncorhynchus mykiss) (similar substance)	No information available	EL50 (48h) >1000 mg/L (Daphnia magna) (similar substance) LC50 (10d) 86.95 mg/kg (Corophium volutator) (similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Methanol	67-56-1	(95-97% @ 20d)
Alcohols, C14-C15, ethoxylated	68951-67-7	Readily biodegradable (72% @ 28d)
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available

Propargyl alcohol	107-19-7	Readily biodegradable (95% @ 28d)
Alkenes, C >10 alpha-	64743-02-8	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Methanol	67-56-1	-0.77 BCF = 1.0 – 4.5 (Cyprinus carpio) BCF < 10 (Leuciscus idus melanotus)
Alcohols, C14-C15, ethoxylated	68951-67-7	6.03
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	-0.35 @ 25°C BCF: 3
Alkenes, C >10 alpha-	64743-02-8	Log Kow = 4.13-6.59

12.4. Mobility in soil

Substances	CAS Number	Mobility
Methanol	67-56-1	No information available
Alcohols, C14-C15, ethoxylated	68951-67-7	No information available
Thiourea, polymer with formaldehyde and 1-phenylethanone	68527-49-1	No information available
Propargyl alcohol	107-19-7	KOC = 1.325
Alkenes, C >10 alpha-	64743-02-8	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
Methanol	Not PBT/vPvB
Alcohols, C14-C15, ethoxylated	Not PBT/vPvB
Propargyl alcohol	Not PBT/vPvB
Alkenes, C >10 alpha-	Not PBT/vPvB

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

This product does not contain any known or suspected endocrine disruptors

SECTION 13: Disposal Considerations
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13.1. Waste treatment methods**Disposal Method**

Disposal should be made in accordance with federal, state, and local regulations. Incineration recommended in approved incinerator according to federal, state, and local regulations.

Contaminated Packaging

Follow all applicable national or local regulations.

SECTION 14: Transport Information
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IMDG/IMO

UN Number: UN2924
UN Proper Shipping Name: Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Propargyl Alcohol)
Transport Hazard Class(es): 3 (8)
Packing Group: II
Environmental Hazards: Marine Pollutant (Contains Ethoxylated Alcohol)

RID

UN Number: UN2924
UN Proper Shipping Name: Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Propargyl Alcohol)
Transport Hazard Class(es): 3 (8)
Packing Group: II
Environmental Hazards: Marine Pollutant (Contains Ethoxylated Alcohol)

ADR

UN Number: UN2924

UN Proper Shipping Name:	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Propargyl Alcohol)
Transport Hazard Class(es):	3 (8)
Packing Group:	II
Environmental Hazards:	Marine Pollutant (Contains Ethoxylated Alcohol)

IATA/ICAO

UN Number:	UN2924
UN Proper Shipping Name:	Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Propargyl Alcohol)
Transport Hazard Class(es):	3 (8)
Packing Group:	II
Environmental Hazards:	Marine Pollutant (Contains Ethoxylated Alcohol)

14.1. UN Number: UN2924**14.2. UN Proper Shipping Name:** Flammable Liquid, Corrosive, N.O.S. (Contains Methanol, Propargyl Alcohol)**14.3. Transport Hazard Class(es):** 3 (8)**14.4. Packing Group:** II**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**

EINECS Inventory	This product, and all its components, complies with EINECS
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian DSL Inventory	All components listed on inventory or are exempt.

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)	WGK 2: Hazard to waters.
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15.2. Chemical Safety Assessment

No information available

SECTION 16: Other Information**Full text of H-Statements referred to under sections 2 and 3**

H225 - Highly flammable liquid and vapor

H226 - Flammable liquid and vapor

H301 - Toxic if swallowed

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H310 - Fatal in contact with skin

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H318 - Causes serious eye damage

H330 - Fatal if inhaled

H331 - Toxic if inhaled

H370 - Causes damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

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%

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/

OSHA

ECHA C&L

Revision Date: 24-Sep-2015

Revision Note

SDS sections updated: 1

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

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End of Safety Data Sheet