

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

CON DET® E

Revision Date: 08-Sep-2015

Revision Number: 29

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

1.1. Product Identifier

Product Name CON DET® E
Internal ID Code HM004395

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

Recommended Use Anionic Surfactant
Sector of use SU2 - Mining, (including offshore industries)
Product category PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents, other unspecific
Process categories 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 Manufacturing Services, Ltd.
Halliburton House, Howemoss Crescent
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

Serious Eye Damage / Eye Irritation

Category 1 - H318

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

H318 - Causes serious eye damage

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

P280 - Wear protective gloves/eye protection/face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P338 - Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

Contains**Substances****CAS Number**

Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt 85117-50-6

Amides, coco, N,N-bis (hydroxyethyl) 68603-42-9

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.
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	285-600-2	85117-50-6	5 - 10%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Chronic 3 (H412)	No data available
Amides, coco, N,N-bis (hydroxyethyl)	271-657-0	68603-42-9	1 - 5%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) 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, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes

In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Seek immediate medical attention/advice. Suitable emergency eye wash facility should be immediately available

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 eye irritation which may damage tissue.

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

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

Use appropriate protective equipment. 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. Consult local authorities.

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

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse. Ensure adequate ventilation. 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 container closed when not in use.

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
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Germany	Spain	Portugal	Finland
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark	Romania	Croatia	Cyprus
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Not applicable	Not applicable	Not applicable	Not applicable
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	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.

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

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): Nitrile gloves. (>= 0.35 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

Normal work coveralls.

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:** Red
Odor: Characteristic **Odor Threshold:** No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
pH:	6-8
Freezing Point/Range	-2 °C
Melting Point/Range	No data available
Boiling Point/Range	100 °C / 212 °F
Flash Point	> 99 °C / > 210.2 °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	No data available
Specific Gravity	1.05
Water Solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	
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

None anticipated

10.5. Incompatible Materials

Strong oxidizers.

10.6. Hazardous Decomposition Products

Oxides of nitrogen. Oxides of sodium.

SECTION 11: Toxicological Information**11.1. Information on Toxicological Effects****Acute Toxicity****Inhalation**

May cause mild respiratory irritation.

Eye Contact

Causes severe eye irritation which may damage tissue.

Skin Contact

Causes moderate skin irritation.

Ingestion

Irritation of the mouth, throat, and stomach.

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	650 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	No data available
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data available	No data available	No data available

Substances	CAS	Skin corrosion/irritation
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	Number	
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Causes moderate skin irritation. (Rabbit) (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Irritating to skin. (Rabbit)

Substances	CAS Number	Eye damage/irritation
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Corrosive to eyes (Rabbit) (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Irritating to eyes. (Rabbit)

Substances	CAS Number	Skin Sensitization
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Did not cause sensitization on laboratory animals (guinea pig) Patch test on human volunteers did not demonstrate sensitization properties (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	No information available
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No information available

Substances	CAS Number	Mutagenic Effects
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	In vitro tests did not show mutagenic effects Some in vivo tests have shown mutagenic effects.

Substances	CAS Number	Carcinogenic Effects
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	No information available.
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Did not show teratogenic effects in animal experiments.

Substances	CAS Number	STOT - single exposure
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	May cause respiratory irritation.
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data of sufficient quality are available.

Substances	CAS Number	Aspiration hazard
Benzenesulfonic acid,	85117-50-6	Not applicable

mono C10-14 alkyl derivatives sodium salt		
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	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
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	IC50: 9.1 mg/L (similar substance)	LC50 (96h) 4.1 mg/L (Lepomis macrochirus) (similar substance) LC50 (96h) 3.2 mg/L (Pimephales promelas) (similar substance) NOEC (196d) 0.63 mg/L (Pimephales promelas) (similar substance) NOEC (72d) 0.23 mg/L (Salmo gairdneri) (similar substance)	EC10 (96h) 51 mg/L (Pseudomonas putida) (similar substance) EC50 (6h) 5 mg/L (Pseudomonas fluorescens) (similar substance)	EC50 (24h) 5.9 mg/L (Daphnia magna) (similar substance) EC50 (48h) 4.1 mg/L (Daphnia magna) (similar substance) NOEC (21d) 1.18 mg/L (Daphnia magna) (similar substance)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	LC50 (96h) 3.6 mg/L (Brachydanio rerio)	EC50 (72h) 2.2 mg/L (Scenedesmus subspicatus)	No information available	EC50 (48h) 2.25 mg/L (Ceriodaphnia dubia) NOEC (21d) 1.0 mg/L (Daphnia magna)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	Readily biodegradable (94% @ 28d) (similar substances)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Readily biodegradable (84% @ 28d)

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	BCF: 87 L/kg (similar substance)
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No information available

12.4. Mobility in soil

Substances	CAS Number	Mobility
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	85117-50-6	No information available
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	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
Benzenesulfonic acid, mono C10-14 alkyl derivatives sodium salt	Not PBT/vPvB
Amides, coco, N,N-bis (hydroxyethyl)	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

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.

SECTION 14: Transport Information

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

RID

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

ADR

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
Environmental Hazards:	Not applicable

14.1. UN Number:	Not restricted
14.2. UN Proper Shipping Name:	Not restricted
14.3. Transport Hazard Class(es):	Not applicable
14.4. Packing Group:	Not applicable
14.5. Environmental Hazards:	Not applicable
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	Product contains one or more components not listed on the inventory.
Canadian DSL Inventory	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) WGK 2: Hazard to waters.

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
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
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/

Revision Date: 08-Sep-2015

Revision Note

SDS sections updated: 1

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