

SAFETY DATA SHEET

Product Trade Name: CON DET®

Revision Date: 16-Aug-2016

Revision Number: 25

1. Identification

1.1. Product Identifier

Product Trade Name: CON DET®
Synonyms: None
Chemical Family: Anionic and Nonionic Surfactant
Internal ID Code: HM003454

1.2 Recommended use and restrictions on use

Application: Anionic Surfactant
Uses advised against: No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier

Baroid Fluid Services
Product Service Line of Halliburton
P.O. Box 1675
Houston, TX 77251
Telephone: (281) 575-5000
Emergency Telephone: 1-866-519-4752 (US, Canada, Mexico) or 1-760-476-3962

Halliburton Energy Services
645 - 7th Ave SW Suite 1800
Calgary, AB
T2P 4G8
Canada

Prepared By: Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number: 1-866-519-4752 or 1-760-476-3962

2. Hazard(s) Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Serious Eye Damage/Irritation	Category 2A Category 2 - H319
Acute Aquatic Toxicity	Category 3 - H402

2.2. Label Elements

Hazard pictograms



Signal Word: Warning

Hazard Statements H319 - Causes serious eye irritation
H402 - Harmful to aquatic life

Precautionary Statements

Prevention P264 - Wash face, hands and any exposed skin thoroughly after handling
P273 - Avoid release to the environment
P280 - Wear eye protection/face protection

Response P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention

Storage None

Disposal P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	5 - 10%	Skin Irrit. 2 (H315) Eye Irrit. 2A (H319) Aquatic Acute 2 (H401) Aquatic Chronic 3 (H412)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	1 - 5%	Eye Irrit. 2A (H319)
Isopropanol	67-63-0	1 - 5%	Eye Irrit. 2 (H319) STOT SE 3 (H336) Flam. Liq. 2 (H225)
Potassium pyrophosphate	7320-34-5	1 - 5%	Eye Irrit. 2A (H319)
Potassium hydroxide	1310-58-3	0.1 - 1%	Acute Tox. 4 (H302) Skin Corr. 1 (H314) Eye Corr. 1 (H318) STOT SE 3 (H335) Met. Corr. 1 (H290)

The exact percentage (concentration) of the composition has been withheld as proprietary.

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 15 minutes and get medical attention if irritation persists.

Skin Flush skin with large amounts of water. If irritation persists, get medical attention.

Ingestion Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

4.2 Most important symptoms/effects, acute and delayed

Causes eye irritation. Causes mild skin irritation.

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

Notes to Physician Treat symptomatically.

5. Fire-fighting 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 Specific hazards arising from the substance or mixture

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

5.3 Special protective equipment and precautions for fire-fighters

Special protective equipment for firefighters

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

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.

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.

7. Handling and storage

7.1. Precautions for safe handling

Handling Precautions

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

Storage Information

Keep container closed when not in use. Product has a shelf life of 60 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
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Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable	Not applicable
Isopropanol	67-63-0	TWA: 400 ppm	TWA: 200 ppm STEL: 400 ppm
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable
Potassium hydroxide	1310-58-3	Not applicable	2 mg/m ³

8.2 Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

8.3 Individual protection measures, such as personal protective equipment

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:
Organic vapor respirator.

Hand Protection Impervious rubber 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

9.1. Information on basic physical and chemical properties

Physical State: Liquid **Color** Transparent Red
Odor: Alcohol **Odor** No information available
Threshold:

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
pH:	9.5 @ 1%
Freezing Point / Range	-2.2 °C / 28 °F
Melting Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	99 °C / 210 °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	1.025
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

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

Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation	May cause mild respiratory irritation.
Eye Contact	Causes eye irritation.
Skin Contact	Causes mild skin irritation.
Ingestion	May cause abdominal pain, vomiting, nausea, and diarrhea.

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

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data available	No data available	No data available
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	7200 mg/kg (Rat) > 7000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>6.41 mg/L (Rabbit) 3.87h (similar substance)
Isopropanol	67-63-0	5840 mg/kg-bw (rat)	12870 mg/kg-bw (rabbit)	72.6 mg/L (Rat, 4h, vapor)
Potassium pyrophosphate	7320-34-5	2440 mg/kg (Rat) (similar substance)	4640 mg/kg (Rabbit) > 2000 mg/kg (Rat)	> 1.1 mg/L (Rat) 4h (saturated concentration)
Potassium hydroxide	1310-58-3	214 mg/kg (Rat) 273 mg/kg (Rat) 333 - 388 mg/kg (Rat)	No data available	No data available

Substances	CAS Number	Skin corrosion/irritation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Irritating to skin. (Rabbit)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not irritating to skin in rabbits.
Isopropanol	67-63-0	Non-irritating to the skin (Rabbit)
Potassium pyrophosphate	7320-34-5	Not irritating to skin in rabbits.
Potassium hydroxide	1310-58-3	Corrosive to skin (Rabbit)

Substances	CAS Number	Serious eye damage/irritation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Irritating to eyes (Rabbit)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Eye, rabbit: Causes moderate eye irritation
Isopropanol	67-63-0	Causes moderate eye irritation (Rabbit)
Potassium pyrophosphate	7320-34-5	Eye, rabbit: Causes moderate eye irritation
Potassium hydroxide	1310-58-3	Corrosive to eyes (Rabbit)

Substances	CAS Number	Skin Sensitization
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Did not cause sensitization on laboratory animals (guinea pig)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)
Isopropanol	67-63-0	Did not cause sensitization on laboratory animals (guinea pig)
Potassium pyrophosphate	7320-34-5	Did not cause sensitization on laboratory animals (mouse) (similar substances)
Potassium hydroxide	1310-58-3	Did not cause sensitization on laboratory animals (guinea pig)

Substances	CAS Number	Respiratory Sensitization
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No information available
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	No information available
Isopropanol	67-63-0	No information available
Potassium pyrophosphate	7320-34-5	No information available
Potassium hydroxide	1310-58-3	No information available

Substances	CAS Number	Mutagenic Effects
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.
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	While some in vitro tests were positive and/or equivocal, in vivo results were negative. (similar substances)
Isopropanol	67-63-0	In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects.
Potassium pyrophosphate	7320-34-5	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)
Potassium hydroxide	1310-58-3	Not regarded as mutagenic.

Substances	CAS Number	Carcinogenic Effects
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data of sufficient quality are available.
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Did not show carcinogenic effects in animal experiments (Rat)
Isopropanol	67-63-0	Did not show carcinogenic effects in animal experiments
Potassium pyrophosphate	7320-34-5	No information available
Potassium hydroxide	1310-58-3	No data of sufficient quality are available.

Substances	CAS Number	Reproductive toxicity
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Did not show teratogenic effects in animal experiments.
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Did not show teratogenic effects in animal experiments.
Isopropanol	67-63-0	No significant toxicity observed in animal studies at concentration requiring classification. Animal testing did not show any effects on fertility.
Potassium pyrophosphate	7320-34-5	Did not show teratogenic effects in animal experiments. (similar substances)
Potassium hydroxide	1310-58-3	Not applicable due to corrosivity of the substance.

Substances	CAS Number	STOT - single exposure
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No significant toxicity observed in animal studies at concentration requiring classification.
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Isopropanol	67-63-0	May cause headache, dizziness, and other central nervous system effects.
Potassium pyrophosphate	7320-34-5	No significant toxicity observed in animal studies at concentration requiring classification.
Potassium hydroxide	1310-58-3	Not applicable due to corrosivity of the substance.

Substances	CAS Number	STOT - repeated exposure
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No data of sufficient quality are available.
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Isopropanol	67-63-0	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Potassium pyrophosphate	7320-34-5	No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Potassium hydroxide	1310-58-3	Not applicable due to corrosivity of the substance.

Substances	CAS Number	Aspiration hazard
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable
Isopropanol	67-63-0	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Potassium hydroxide	1310-58-3	Not applicable

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Product is not classified as hazardous to the environment.

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
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)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	EC50 (96h) >230 mg/L (Pseudokirchnerella subcapitata)	LC50 (96h) >1580 mg/L (Oncorhynchus mykiss)	EC10 (3h) > 1000 mg/L (Activated sludge, domestic)	EC50 (48h) >1000 mg/L (Daphnia magna)
Isopropanol	67-63-0	EC50 (72h) > 1000 mg/L (Desmodesmus subspicatus) EC50 (7d) 1800 mg/L (Scenedesmus quadricauda)	LC50 (96h) 9640 mg/L (Pimephales promelas) LC50 (7d) 7060 mg/L (Poecilia reticulata)	TT (16h) 1050 mg/L (Pseudomonas putida)	EC50 (48h) 13,299 mg/L (Daphnia magna) EC50 (24h) > 10,000 mg/L (Daphnia magna)
Potassium pyrophosphate	7320-34-5	EC50 (72h) > 100 mg/L (Desmodesmus subspicatus)	LC50 (96h) > 100 mg/L (Oncorhynchus mykiss) (similar substance)	No information available	EC50 (48h) > 100 mg/L (Daphnia magna)
Potassium hydroxide	1310-58-3	No information available	LC50 (96h) 80 mg/L (Gambusia affinis) (TLm) Lethal Concentration (24h) 56 mg/L (Lepomis macrochirus) NOEC (24h) 28 mg/L (Lepomis macrochirus)	EC50 (15m) 22 mg/L (Photobacterium phosphoreum)	TLM96 251,200 ppm (Mysidopsis bahia) EC100 (2d) > 10 mg/L (Dreissena polymorpha)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Readily biodegradable (84% @ 28d)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	(84% @ 28d)
Isopropanol	67-63-0	Readily biodegradable (53% @ 5d)
Potassium pyrophosphate	7320-34-5	The methods for determining biodegradability are not applicable to inorganic substances.
Potassium hydroxide	1310-58-3	The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No information available
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	-3.12
Isopropanol	67-63-0	LogKow < 4.5
Potassium pyrophosphate	7320-34-5	No information available
Potassium hydroxide	1310-58-3	0.65 - 0.83

12.4. Mobility in soil

Substances	CAS Number	Mobility
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	No information available
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	KOC = 1.0 (estimated)
Isopropanol	67-63-0	KOC = 1.5
Potassium pyrophosphate	7320-34-5	Soluble in water
Potassium hydroxide	1310-58-3	No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1. Waste treatment methods****Disposal methods**

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

Contaminated Packaging

Follow all applicable national or local regulations.

14. Transport Information**US DOT**

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable

Canadian TDG

UN Number Not restricted
UN proper shipping name: Not restricted
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: 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
Environmental Hazards: Not applicable

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

15. Regulatory Information

US Regulations

US TSCA Inventory All components listed on inventory or are exempt.

TSCA Significant New Use Rules - S5A2

Substances	CAS Number	TSCA Significant New Use Rules - S5A2
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable
Isopropanol	67-63-0	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Potassium hydroxide	1310-58-3	Not applicable

EPA SARA Title III Extremely Hazardous Substances

Substances	CAS Number	EPA SARA Title III Extremely Hazardous Substances
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable
Isopropanol	67-63-0	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Potassium hydroxide	1310-58-3	Not applicable

EPA SARA (311,312) Hazard Class

Acute Health Hazard

EPA SARA (313) Chemicals

Substances	CAS Number	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable	Not applicable
Isopropanol	67-63-0	1.0%	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable
Potassium hydroxide	1310-58-3	Not applicable	Not applicable

EPA CERCLA/Superfund Reportable Spill Quantity

Substances	CAS Number	CERCLA RQ
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not applicable
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	Not applicable
Isopropanol	67-63-0	Not applicable
Potassium pyrophosphate	7320-34-5	Not applicable
Potassium hydroxide	1310-58-3	1000 lb 454 kg

EPA RCRA Hazardous Waste Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.

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.

NFPA Ratings: Health 1, Flammability 0, Reactivity 0
HMIS Ratings: Health 1, Flammability 0, Physical Hazard 0, PPE: B

Canadian Regulations

Canadian Domestic Substances List (DSL) All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By Chemical Stewardship
Telephone: 1-281-871-6107
e-mail: fdunexchem@halliburton.com

Revision Date: 16-Aug-2016

Reason for Revision SDS sections updated:
2

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 Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms used in the safety data sheet

bw – body weight
CAS – Chemical Abstracts Service
d - day
EC50 – Effective Concentration 50%
ErC50 – Effective Concentration growth rate 50%
h - hour
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
mg/m³ - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PEL – Permissible Exposure Limit
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
UN – United Nations
w/w - weight/weight

Key literature references and sources for data

www.ChemADVISOR.com/
NZ CCID

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information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet