HALLIBURTON

SAFETY DATA SHEET

CON DET®

Revision Date: 09-Sep-2020 **Revision Number:** 28

1. Product Identifier & Identity for the Chemical

Statement of Hazardous Nature Hazardous according to the criteria of the 3rd Revised Edition of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous Goods according to the criteria of ADG.

1.1. Product Identifier

Product Name CON DET®

Other means of Identification

Synonyms None

Hazardous Material Number: HM003454

Recommended use of the chemical and restrictions on use

Recommended Use Anionic Surfactant

Uses advised against No information available

Supplier's name, address and phone number

Manufacturer/Supplier Halliburton/Baroid Australia Pty. Ltd.
15 Marriott Road, Jandakot, WA 6164
Australia
ACN Number: 009 000 775
Telephone Number: + 61 1 800 686 951
Fax Number: 61 (08) 9455 5300

E-mail Address fdunexchem@halliburton.com

Emergency phone number

+ 61 1 800 686 951
Global Incident Response Access Code: 334305
Contract Number: 14012

Australian Poisons Information Centre
24 Hour Service: - 13 11 26
Police or Fire Brigade: - 000 (exchange): - 1100

2. Hazard Identification

Statement of Hazardous Nature Hazardous according to the criteria of the 3rd Revised Edition of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous Goods according to the criteria of ADG.

Classification of the hazardous chemical

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

Label elements, including precautionary statements

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

Contains

Substances	**CAS Number**
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7
Isopropanol	67-63-0
Potassium pyrophosphate	7320-34-5
Potassium hydroxide	1310-58-3

Other hazards which do not result in classification
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).

For the full text of the H-phrases mentioned in this Section, see Section 16

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - Australia
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	5 - 10%	Skin Irrit. 2 (H315) Eye Corr. 1 (H318) Aquatic Acute 2 (H401) Aquatic Chronic 2 (H411)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	1 - 5%	Eye Irrit. 2 (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)

4. First aid measures

Description of necessary 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.

Symptoms caused by exposure

Causes mild skin irritation. Causes eye irritation.

Medical Attention and Special Treatment

Notes to Physician Treat symptomatically

5. Fire Fighting Measures

Suitable extinguishing equipment

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Specific hazards arising from the chemical

Special exposure hazards in a fire

Decomposition in fire may produce harmful gases.

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.

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.

Other Guidelines

No information available

8. Exposure Controls/Personal Protection

Control parameters - exposure standards, biological monitoring

Exposure Limits

Substances	CAS Number	Australia NOHSC	ACGIH TLV-TWA
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: 983 mg/m^3 STEL: 500 ppm STEL: 1230 mg/m^3	TWA: 200 ppm STEL: 400 ppm
Potassium pyrophosphate	7320-34-5	Not applicable	Not applicable
Potassium hydroxide	1310-58-3	Not applicable	Ceiling: 2 mg/m^3

Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

Personal protective equipment (PPE)

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.

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

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

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

Property Remarks/ - Method	Values
pH:	9.5 @ 1%
Freezing Point / Range	-2.2 °C
Melting Point / Range	No data available
Pour Point / Range	No data available
Boiling Point / Range	No data available
Flash Point	99 °C / 210 °F (PMCC)
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

Information on routes of exposure
Principle Route of Exposure Eye or skin contact, inhalation.

Symptoms related to exposure
Most Important Symptoms/Effects
Causes mild skin irritation. Causes eye irritation.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	>5000 mg/kg-bw (rat)	>2000 mg/kg-bw (rabbit)	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	4700 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	333 mg/kg (Rat)	No data available	No data available

Immediate, delayed and chronic health effects from exposure
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.

Exposure Levels
No data available

Interactive effects
None known.

Data limitations
No data available

Substances	CAS Number	Skin corrosion/irritation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Irritating to skin. (Rabbit)
Benzenesulfonic acid,	1300-72-7	Not irritating to skin in rabbits.

dimethyl-, sodium salt		
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	Causes severe eye irritation (Rabbit) (similar substances)
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	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	May cause respiratory irritation.

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

Ecotoxicity

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	EC50(72h) 2.2 mg/L (Scenedesmus subspicatus)	LC50(96h) 3.6 mg/L (Brachydanio rerio) NOEC(28d)=0.32 mg/L (Oncorhynchus mykiss)	No information available	EC50(48h) 2.25 mg/L (Ceriodaphnia dubia) NOEC(21d) 0.07 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 (meanextinction value)(Scenedesmus quadricauda)	LC50 (96h) 9640 mg/L (Pimephales promelas) LC50 (7d) 7060 mg/L (Poecilia reticulata)	TT (16h) 1050 mg/L (Pseudomonas putida)	EC50 (48 h)=2285 mg/L (Daphnia sp.) 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	NOEC (24h) 28 mg/L (Lepomis macrochirus)	No information available	EC100 (48h) > 10 mg/L (Dreissena polymorpha)(similar substance)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Readily biodegradable (92.5% @ 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	Bioaccumulation
Amides, coco, N,N-bis (hydroxyethyl)	68603-42-9	Not Bioaccumulative; BCF=65.4 L/kg (similar substance)
Benzenesulfonic acid, dimethyl-, sodium salt	1300-72-7	-3.12
Isopropanol	67-63-0	LogPow < 4.5
Potassium pyrophosphate	7320-34-5	No information available
Potassium hydroxide	1310-58-3	Not Bioaccumulative

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	No information available
Potassium pyrophosphate	7320-34-5	Soluble in water
Potassium hydroxide	1310-58-3	No information available

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

Safe handling and disposal methods

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

Disposal of any contaminated packaging

Follow all applicable national or local regulations.

Environmental regulations

Not applicable

14. Transport Information

Transportation Information

Australia ADG

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 during transport

None

HazChem Code
None Allocated

15. Regulatory Information

Safety, health and environmental regulations specific for the product

International Inventories

Australian AICS Inventory	All components are listed on the AIIC or are subject to a relevant exemption, permit, or assessment certificate.
New Zealand Inventory of Chemicals	All components are listed on the NZIoC or are subject to a relevant exemption, permit, or assessment certificate.
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian Domestic Substances List (DSL)	All components listed on inventory or are exempt.

Poisons Schedule number
None Allocated

International Agreements

Montreal Protocol - Ozone Depleting Substances:	Does not apply.
Stockholm Convention - Persistent Organic Pollutants:	Does not apply
Rotterdam Convention - Prior Informed Consent:	Does not apply.
Basel Convention - Hazardous Waste:	Does not apply.

16. Other information

Date of preparation or review

Revision Date: 09-Sep-2020

Revision Note
SDS sections updated:
2

Full text of H-Statements referred to under sections 2 and 3
H272 - May intensify fire; oxidizer
H290 - May be corrosive to metals
H225 - Highly flammable liquid and vapor
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

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 abreviations or acronyms used
bw – body weight
CAS – Chemical Abstracts Service
EC50 – Effective Concentration 50%
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%

LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
NOEC – No Observed Effect Concentration
OEL – Occupational Exposure Limit
PBT – Persistent Bioaccumulative and Toxic
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
vPvB – very Persistent and very Bioaccumulative
h - hour
mg/m^3 - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
w/w - weight/weight
d - day

Key literature references and sources for data
www.ChemADVISOR.com/
NZ CCID

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End of Safety Data Sheet