

SAFETY DATA SHEET

1. Identification

Identification

Product name: SUPERWET

Additional identification

Chemical name: Drilling Fluid Additive

Recommended use and restriction on use

Recommended use: WEC Drilling
Restrictions on use: None identified.

Details of the supplier of the safety data sheet

Supplier

Company Name: INTEGRITY DELAWARE, LLC
Address: 2710 EAST CORRAL
KINGSVILLE, TX 78363
US
Telephone: (+1) 361 595 5561

Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 7035273887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Inhalation - vapor)	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A

Unknown toxicity

Acute toxicity, oral	46.0 %
Acute toxicity, dermal	46.0 %
Acute toxicity, inhalation, vapor	98.0 %
Acute toxicity, inhalation, dust or mist	50.0 %

Label Elements:

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.

Precautionary Statement:

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Call a POISON CENTER/doctor if you feel unwell. Specific treatment (see this label). Take off contaminated clothing.

Other hazards which do not result in GHS classification: None identified.

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Calcium sulfonate	Confidential	40 - 50%
2-Ethylhexanol	104-76-7	5 - 10%
Butyl cellosolve	111-76-2	1 - 5%
Diethylene glycol monobutyl ether	112-34-5	1 - 5%

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/.../if you feel unwell.

Skin Contact: Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	CO ₂ , dry chemical, foam, water spray, water fog.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.
Special protective equipment and precautions for firefighters	
Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Recommend wearing self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep upwind. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.
Methods and material for containment and cleaning up:	Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Observe good industrial hygiene practices. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Launder contaminated clothing before reuse.
Maximum Handling Temperature:	Not determined.
Conditions for safe storage, including any incompatibilities:	Store away from incompatible materials. See section 10 for incompatible materials.
Maximum Storage Temperature:	Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Butyl cellosolve	TWA	20 ppm	US. ACGIH Threshold Limit Values (02 2012)
Butyl cellosolve	REL	5 ppm 24 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Butyl cellosolve	PEL	50 ppm 240 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Diethylene glycol monobutyl ether - Inhalable fraction and vapor.	TWA	10 ppm	US. ACGIH Threshold Limit Values (03 2013)

Biological Limit Values

Chemical name	Exposure Limit Values	Source
Butyl cellosolve (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.)	200 mg/g (Creatinine in urine)	ACGIH BEI (03 2013)

Appropriate engineering controls:

Adequate ventilation should be provided so that exposure limits are not exceeded. No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information:

Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eyeface protection:

Wear tight-fitting goggles or face shield.

Skin Protection

Hand Protection:

Suitable gloves can be recommended by the glove supplier. Chemical resistant gloves

Other:

Chemical resistant boots. Gloves, coveralls, apron, boots as necessary to minimize contact. Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection:

Use respirator with a combination organic vapor and dust/mist cartridge. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures:

Observe good industrial hygiene practices. Avoid contact with skin. Avoid contact with eyes. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties**Appearance**

Physical state:	liquid
Form:	liquid
Color:	Brown
Odor:	Characteristic
Odor threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	> 199.99 °F (93.33 °C) (Test method unavailable)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.95 - 0.99 68 °F (20 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Not determined.
Incompatible Materials:	Alkalies.
Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

11. Toxicological information**Information on likely routes of exposure**

Inhalation:	Harmful if inhaled.
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Ingestion: No data available.

Skin Contact: Causes skin irritation.

Eye contact: Causes serious eye irritation.

Information on toxicological effects**Acute toxicity****Oral**

Product: ATEmix 5,000 - 10,000 mg/kg.
Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness. Ingestion may cause red blood cell hemolysis and possible liver and kidney injury. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal

Product: ATEmix > 5,000 mg/kg

Inhalation

Product: ATEmix (, 4 h): 10 - 20 mg/l. Vapour
ATEmix (, 4 h): >5 mg/l. Dusts, mists and fumes
High concentrations may cause headaches, dizziness, nausea, behavioral changes, weakness, drowsiness and stupor. High concentrations may cause headaches, dizziness, weakness, irritability and other behavioral changes, nausea, and vomiting. Vapor from heated material may cause headache, nausea, and dizziness.

Skin Corrosion/Irritation:

Product: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Remarks: Causes skin irritation.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

2-Ethylhexanol	Classification: Not a skin sensitizer. (Literature)
Butyl cellosolve	Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer.
Diethylene glycol monobutyl ether	Classification: Not a skin sensitizer. (Literature) Not a skin sensitizer.

Specific Target Organ Toxicity - Single Exposure:

2-Ethylhexanol	Respiratory tract irritation.
Butyl cellosolve	Nose, throat and lung irritant.

Diethylene glycol monobutyl ether If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Aspiration Hazard:

No data available

Other effects:

Butyl cellosolve

Central nervous system

Chronic Effects**Carcinogenicity:**

Product:

Not available.

Butyl cellosolve

Butyl cellosolve: A National Toxicology Program (NTP) chronic inhalation study revealed some evidence of carcinogenic activity in male and female mice, equivocal evidence in female rats. and no evidence in male rats.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity:

2-Ethylhexanol

This material has not exhibited mutagenic or genotoxic potential in laboratory tests.

Butyl cellosolve

This material has not exhibited mutagenic or genotoxic potential in laboratory tests.

Reproductive toxicity:

2-Ethylhexanol

No evidence of adverse effects were found in a developmental toxicity study of 2-ethylhexanol in rats. Doses up to 3 ml/kg applied to the skin during the most critical part of the gestation period produced evidence of toxicity to mothers, but no evidence of injury in the developing offspring. In a previous study, birth defects were observed by oral administration, an unlikely route of exposure in the workplace.

Butyl cellosolve

Based on available data this product is not expected to be classified a reproductive hazard. Butyl cellosolve causes fetotoxicity in lab animals at doses which are maternally toxic.

Specific Target Organ Toxicity - Repeated Exposure:

2-Ethylhexanol	Repeated overexposure may result in liver and kidney damage. A 14-day dermal toxicity study of 2-ethylhexanol in rats showed blood effects, decreased spleen weight and decreased triglycerides. Unknown: Target Organ(s): Blood, Liver, Spleen., Kidney
Butyl cellosolve	Repeated overexposure may result in liver and kidney damage. Dermal: Target Organ(s): Blood Inhalation: Target Organ(s): Blood Oral: Target Organ(s): Blood
Diethylene glycol monobutyl ether	Oral: Target Organ(s): blood formation system Prolonged and repeated exposure to diethylene glycol monobutyl ether may cause hemolytic anemia based on data with laboratory animals.

12. Ecological information

Ecotoxicity

Fish

2-Ethylhexanol	LC 50 (Fathead Minnow, 4 d): 28.2 mg/l LC 50 (Golden Orfe, 4 d): 17.1 mg/l NOEC (Golden Orfe, 4 d): 14 mg/l
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Butyl cellosolve	LC 50 (Bluegill Sunfish, 4 d): 1,490 mg/l LC 50 (Rainbow Trout, 4 d): 1,471 mg/l LC 50 (Zebra Fish, 21 d): > 100 mg/l NOEC (Zebra Fish, 21 d): > 100 mg/l
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Diethylene glycol monobutyl ether	LC 50 (Fathead Minnow, 4 d): 2,500 mg/l
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Aquatic Invertebrates

2-Ethylhexanol	EC 50 (Water flea (Daphnia magna), 2 d): 39 mg/l
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Butyl cellosolve	EC 50 (Water flea (Daphnia magna), 2 d): 1,550 mg/l EC 50 (Water flea (Daphnia magna), 21 d): 297 mg/l NOEC (Water flea (Daphnia magna), 21 d): 100 mg/l
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Diethylene glycol monobutyl ether	EC 50 (Water flea (Daphnia magna), 2 d): > 1,000 mg/l
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Toxicity to Aquatic Plants

2-Ethylhexanol	EC 50 (Green algae (Scenedesmus quadricauda), 3 d): 16.6 mg/l
Butyl cellosolve	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 911 mg/l EC 50 (Green algae (Selenastrum capricornutum), 7 d): > 1,000 mg/l NOEC (Green algae (Selenastrum capricornutum), 3 d): 88 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

2-Ethylhexanol	EC 50 (Pseudomonas putida, 0.1 d): 540 mg/l EC 50 (Sludge, 0.5 d): > 100 mg/l
Butyl cellosolve	EC 50 (Sludge, 0.1 d): > 1,000 mg/l
Diethylene glycol monobutyl ether	EC 50 (Sludge, 0.1 d): > 1,000 mg/l

Persistence and Degradability

Biodegradation

2-Ethylhexanol	OECD TG 302 B, 95 %, 5 d, Readily biodegradable OECD TG 301 C, 100 %, 14 d, Readily biodegradable
Butyl cellosolve	OECD TG 302 B, 100 %, 28 d, Readily biodegradable OECD TG 301 E, 95 %, 28 d, Readily biodegradable OECD TG 301 B, 90.4 %, 28 d, Readily biodegradable
Diethylene glycol monobutyl ether	77 %, 20 d OECD TG 301 E, 94 %, 28 d, Readily biodegradable

Bioaccumulative Potential

Bioconcentration Factor (BCF)

2-Ethylhexanol	Bioconcentration Factor (BCF): 25.35 (calculated)
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Partition Coefficient n-octanol / water (log Kow)

2-Ethylhexanol	Log Kow: 2.9 (Measured)
Butyl cellosolve	Log Kow: 0.81 (Measured)
Diethylene glycol monobutyl ether	Log Kow: 0.29 (calculated)

Mobility:

2-Ethylhexanol	soil - 1.42
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Other Adverse Effects:

No data available.

13. Disposal considerations

Disposal instructions:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging:

Container packaging may exhibit hazards.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. During transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 311 Classifications

Immediate (Acute) Health Hazards

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>CAS number</u>	<u>Percent by Weight</u>	<u>Reportable quantity</u>
Butyl cellosolve	111-76-2	2.0 %	*See regulation for further details
Diethylene glycol monobutyl ether	112-34-5	2.0 %	*See regulation for further details

*These specific chemicals are not listed please check the generic entries on the SARA 304 listings for applicability.

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>	<u>CAS number</u>	<u>Percent by Weight</u>	<u>Reporting threshold for other uses</u>	<u>Reporting threshold for manufacturing and processing</u>
Butyl cellosolve	111-76-2	2.0 %	10000 lbs	25000 lbs
Diethylene glycol monobutyl ether	112-34-5	2.0 %	10000 lbs	25000 lbs

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

Inventory Status

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

This product contains a substance that is not listed on the Japanese Existing and New Chemical Substances (ENCS) list.

Korea (ECL)

May require notification before sale in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

May require notification before sale under Philippines Republic Act 6969.

Switzerland (SWISS)

May require notification before sale in Switzerland.

Taiwan (TCSCA)

This product requires notification before sale in Taiwan.

United States (TSCA)

All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

16. Other information, including date of preparation or last revision
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Issue Date: 03/11/2016

Version #: 1.2

Source of information: Internal company data and other publically available resources.

Further Information: Contact supplier (see Section 1)

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