

SAFETY DATA SHEET

1. Identification

Identification

Product name: DRILLING DETERGENT

Additional identification

Chemical name: Mixture

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

Serious Eye Damage/Eye Irritation Category 2A

Specific Target Organ Toxicity - Repeated Exposure Category 2

Unknown toxicity

Acute toxicity, oral	0.0 %
Acute toxicity, dermal	0.0 %
Acute toxicity, inhalation, vapor	2.0 %
Acute toxicity, inhalation, dust or mist	2.0 %

Label Elements:

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Causes serious eye irritation.
May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement:

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust or mists.

Response: 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. Get medical advice/attention if you feel unwell.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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

3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Diethanolamine	111-42-2	1 - 5%

4. First-aid measures

General information: Get medical advice/attention if you feel unwell.

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

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Skin Contact: Take off contaminated clothing and wash before re-use. Wash 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: Use extinguishing agents appropriate for surrounding fire.

Unsuitable extinguishing media: Not determined.

Specific hazards arising from the chemical: 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: No data available.

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: Open container in a well ventilated area. Avoid breathing vapors. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.

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
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values (02 2012)
Diethanolamine	REL	3 ppm 15 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)

Appropriate engineering controls:

No special requirements under ordinary conditions of use and with adequate ventilation. Use material in well ventilated area only.

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:

If contact is likely, safety glasses with side shields are recommended.

Skin Protection

Hand Protection:

Suitable gloves can be recommended by the glove supplier.

Other:

Chemical resistant boots.

Respiratory Protection:

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 eyes.

9. Physical and chemical properties

Appearance

Physical state:

liquid

Form:

liquid

Color:

Amber

Odor:

Bland

Odor threshold:

No data available.

pH:

7 - 8

Freezing point:

No data available.

Boiling Point:

> 199.9 °F (93.3 °C)

Flash Point:

not applicable

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:	1 60.1 °F (15.6 °C)
Solubility(ies)	
Solubility in water:	Soluble
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.

Other information

Bulk density:	8.33 kg/m3
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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:	None known, avoid contact with reactive chemicals.
Hazardous Decomposition Products:	No data available.

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

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	Causes mild skin irritation.
Eye contact:	Causes serious eye irritation.

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

Product:	Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. ATEmix > 10,000 mg/kg.
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Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation:

Product: Causes mild skin irritation.
Remarks: Prolonged or repeated contact may cause irritation.

Serious Eye Damage/Eye Irritation:

Product: Remarks: Causes serious eye irritation.

Respiratory sensitization:

No data available

Skin sensitization:

Diethanolamine Classification: Not a skin sensitizer. (Literature)

Specific Target Organ Toxicity - Single Exposure:

Diethanolamine 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:

Diethanolamine kidney damage liver damage

Chronic Effects**Carcinogenicity:**

Product: Not available.

Diethanolamine

IARC Monograph 101 reports that there is "inadequate evidence in humans for the carcinogenicity of diethanolamine", as well as that under the conditions of a 2-year carcinogenicity study in rats there was no evidence of carcinogenic activity. In mice, IARC reports that via 13-week administration in drinking water there was evidence of carcinogenic activity. However, IARC states that in mice induction of choline deficiency is the proposed mechanism by which diethanolamine induces liver neoplasms. As humans are less susceptible to choline deficiency than rats or mice, the results are not expected to be predictive of induction of cancer in humans, especially given that there was "inadequate evidence in humans" for carcinogenicity of diethanolamine.

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:

Diethanolamine

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

Reproductive toxicity:

No data available

Specific Target Organ Toxicity - Repeated Exposure:

Diethanolamine

Ingestion of diethanolamine has produced nervous system injury in dogs and rats. In addition, heart lesions have been observed in treated mice. Repeated overexposure may result in liver and kidney damage.

12. Ecological information

Ecotoxicity
Fish

No data available

Aquatic Invertebrates

No data available

Toxicity to Aquatic Plants

No data available

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

No data available

Persistence and Degradability
Biodegradation

No data available

Bioaccumulative Potential
Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (log Kow)

No data available

Mobility:

No data available

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

UN Number:	UN 3082
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.
Transport Hazard Class(es)	
Class:	9
Label(s):	9
Packing Group:	III
Marine Pollutant:	No
Special precautions for user:	None established
Reportable quantity	Diethanolamine 100 lbs

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)

<u>Chemical Identity</u>	<u>CAS number</u>	<u>Reportable quantity</u>	<u>Calculated¹</u>
Diethanolamine	111-42-2	100 lbs	6689 lbs 3035 kgs
Polyphosphate salt	Confidential	5000 lbs	> 50000 lbs > 22680 kgs

¹This is the amount product/material required to be released before CERCLA reporting is required.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 311 Classifications**

Immediate (Acute) Health Hazards
Delayed (Chronic) Health Hazard

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>
Diethanolamine	111-42-2	1.5 %	100 lbs
Polyphosphate salt	Confidential	0.8 %	5000 lbs

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>
Diethanolamine	111-42-2	1.5 %	10000 lbs	25000 lbs

US State Regulations**US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Diethanolamine 1.495%

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)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

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

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

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.

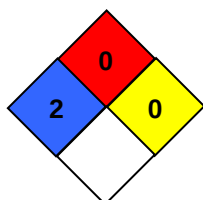
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	*	2
Flammability		0
Physical Hazards		0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Red	Flammability
Blue	Health
Yellow	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 03/24/2016

Version #: 2.0

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

Further Information: Contact supplier (see Section 1)

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