

# SAFETY DATA SHEET

## 1. Identification

### Identification

**Product name:** SAFEVERT LEM

### Additional identification

**Chemical name:** Mixture

### Recommended use and restriction on use

**Restrictions on use:** : WEC Drilling  
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 2B |
| Carcinogenicity                   | Category 2  |
| Aspiration Hazard                 | Category 1  |

#### Unknown toxicity

|                                          |        |
|------------------------------------------|--------|
| Acute toxicity, oral                     | 0.0 %  |
| Acute toxicity, dermal                   | 0.0 %  |
| Acute toxicity, inhalation, vapor        | 72.9 % |
| Acute toxicity, inhalation, dust or mist | 86.4 % |

### Label Elements:

#### Hazard Symbol:



#### Signal Word

Danger

**Hazard Statement:** Causes eye irritation.  
Suspected of causing cancer.  
May be fatal if swallowed and enters airways.

**Precautionary Statement:**

**Prevention:** Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.

**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. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If exposed or concerned: Get medical advice/attention. Collect spillage.

**Storage:** Store locked up.

**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 |
|---------------|------------|-------------------|
| Kerosene      | 64742-81-0 | 10 - 20%          |
| Diesel fuel   | 68334-30-5 | 10 - 20%          |
| Kerosene      | 8008-20-6  | 10 - 20%          |
| Diesel fuel   | 68476-30-2 | 10 - 20%          |

### 4. First-aid measures

**General information:** IF exposed or concerned: Get medical advice/attention.

**Ingestion:** Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Rinse mouth. Immediately call a POISON CENTER/doctor/...

**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:** Symptoms may be delayed.

**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<sub>2</sub>, 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:** 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:** Avoid release to the environment. 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:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid contact with eyes. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination.

**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                                             |
|---------------------------------------------------------------------|------|-----------------------|----------------------------------------------------|
| Kerosene - Non-aerosol. - as total hydrocarbon vapor                | TWA  | 200 mg/m <sup>3</sup> | US. ACGIH Threshold Limit Values (02 2012)         |
| Kerosene                                                            | REL  | 100 mg/m <sup>3</sup> | US. NIOSH: Pocket Guide to Chemical Hazards (2010) |
| Diesel fuel - Inhalable fraction and vapor. - as total hydrocarbons | TWA  | 100 mg/m <sup>3</sup> | US. ACGIH Threshold Limit Values (02 2012)         |
| Kerosene - Non-aerosol. - as total hydrocarbon vapor                | TWA  | 200 mg/m <sup>3</sup> | US. ACGIH Threshold Limit Values (02 2012)         |
| Kerosene                                                            | REL  | 100 mg/m <sup>3</sup> | US. NIOSH: Pocket Guide to Chemical Hazards (2010) |
| Diesel fuel - Inhalable fraction and vapor. - as total hydrocarbons | TWA  | 100 mg/m <sup>3</sup> | US. ACGIH Threshold Limit Values (02 2012)         |

**Appropriate engineering controls:**

No special requirements under ordinary conditions of use and with adequate ventilation.

**Individual protection measures, such as personal protective equipment**

**General information:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

**Eye/face protection:**

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

**Skin Protection**

**Hand Protection:**

Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water. Suitable gloves can be recommended by the glove supplier.

**Other:**

Gloves, coveralls, apron, boots as necessary to minimize contact.

**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. Wash hands before breaks and immediately after handling the product.

**9. Physical and chemical properties****Appearance**

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| <b>Physical state:</b>            | liquid                                     |
| <b>Form:</b>                      | liquid                                     |
| <b>Color:</b>                     | Dark brown                                 |
| <b>Odor:</b>                      | Slight petroleum                           |
| <b>Odor threshold:</b>            | No data available.                         |
| <b>pH:</b>                        | No data available.                         |
| <b>Freezing point:</b>            | No data available.                         |
| <b>Boiling Point:</b>             | No data available.                         |
| <b>Flash Point:</b>               | > 201 °F (94 °C) (Test method unavailable) |
| <b>Evaporation rate:</b>          | No data available.                         |
| <b>Flammability (solid, gas):</b> | No data available.                         |

**Upper/lower limit on flammability or explosive limits**

|                                                 |                        |
|-------------------------------------------------|------------------------|
| <b>Flammability limit - upper (%):</b>          | No data available.     |
| <b>Flammability limit - lower (%):</b>          | No data available.     |
| <b>Explosive limit - upper (%):</b>             | No data available.     |
| <b>Explosive limit - lower (%):</b>             | No data available.     |
| <b>Vapor pressure:</b>                          | No data available.     |
| <b>Vapor density:</b>                           | No data available.     |
| <b>Relative density:</b>                        | 0.94 60.1 °F (15.6 °C) |
| <b>Solubility(ies)</b>                          |                        |
| <b>Solubility in water:</b>                     | Insoluble in water     |
| <b>Solubility (other):</b>                      | No data available.     |
| <b>Partition coefficient (n-octanol/water):</b> | No data available.     |
| <b>Auto-ignition temperature:</b>               | No data available.     |
| <b>Decomposition temperature:</b>               | No data available.     |
| <b>Viscosity:</b>                               | No data available.     |

**Other information**

|                      |             |
|----------------------|-------------|
| <b>Bulk density:</b> | 7.68 lb/gal |
|----------------------|-------------|

**10. Stability and reactivity**

|                                            |                                                                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>                         | No data available.                                                                                                                    |
| <b>Chemical Stability:</b>                 | Material is stable under normal conditions.                                                                                           |
| <b>Possibility of hazardous reactions:</b> | Will not occur.                                                                                                                       |
| <b>Conditions to avoid:</b>                | Not determined.                                                                                                                       |
| <b>Incompatible Materials:</b>             | Strong oxidizing agents.                                                                                                              |
| <b>Hazardous Decomposition Products:</b>   | 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**

|                      |                              |
|----------------------|------------------------------|
| <b>Inhalation:</b>   | No data available.           |
| <b>Ingestion:</b>    | No data available.           |
| <b>Skin Contact:</b> | Causes mild skin irritation. |
| <b>Eye contact:</b>  | Causes eye irritation.       |

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

|         |                                                                                                                                                                                                                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.<br>ATEmix > 10,000 mg/kg. |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Dermal**

|         |                                                            |
|---------|------------------------------------------------------------|
| Product | Not classified for acute toxicity based on available data. |
|---------|------------------------------------------------------------|

**Inhalation**

|         |                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | High concentrations may cause headaches, dizziness, nausea, behavioral changes, weakness, drowsiness and stupor. High concentrations may cause headaches, dizziness, fatigue, nausea, vomiting, drowsiness, stupor, other central nervous system effects leading to visual impairment, respiratory failure, unconsciousness and death.<br>Not classified for acute toxicity based on available data. |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Skin Corrosion/Irritation:**

|         |                                                                                                                                                                                                                                                                                        |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product | Prolonged and repeated exposure causes defatting and cracking of the skin. 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.<br>Remarks: Causes mild skin irritation. |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Serious Eye Damage/Eye Irritation:**

|         |                                 |
|---------|---------------------------------|
| Product | Remarks: Causes eye irritation. |
|---------|---------------------------------|

**Respiratory sensitization:**

No data available

**Skin sensitization:**

|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| Kerosene | (Supplier information) May cause skin sensitization in sensitive individuals. |
|----------|-------------------------------------------------------------------------------|

**Specific Target Organ Toxicity - Single Exposure**

|             |                                                                           |
|-------------|---------------------------------------------------------------------------|
| Kerosene    | May cause irritation to the mucous membranes and upper respiratory tract. |
| Diesel fuel | May cause irritation to the mucous membranes and upper respiratory tract. |

Kerosene May cause respiratory irritation.

Diesel fuel May cause irritation to the mucous membranes and upper respiratory tract.

#### **Aspiration Hazard**

Product May be fatal if swallowed and enters airways.

#### **Other effects**

Kerosene Central Nervous System impairment Skin irritation Upper Respiratory Tract irritation

Kerosene Skin Central nervous system

#### **Chronic Effects**

##### **Carcinogenicity**

Product Lifetime skin painting studies with products similar to kerosene have produced skin tumors or skin cancer in laboratory mice.

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Kerosene Lifetime skin painting studies with products similar to kerosene have produced skin tumors or skin cancer in laboratory mice.

Diesel fuel Lifetime skin painting studies with products similar to kerosene have produced skin tumors or skin cancer in laboratory mice.

#### **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**

Kerosene The American Petroleum Institute tested kerosene in several in vitro and in vivo genotoxicity assays. Although isolated assays gave a positive result there was generally no convincing evidence that kerosene is genotoxic.

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**Reproductive toxicity**

Kerosene

Kerosene was shown to have no teratogenic activity in rats exposed by inhalation at 365 ppm in a study performed by the American Petroleum Institute.

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Kerosene was shown to have no teratogenic activity in rats exposed by inhalation at 365 ppm in a study performed by the American Petroleum Institute.

**Specific Target Organ Toxicity - Repeated Exposure**

Kerosene

Unknown: Target Organ(s): Central nervous system., bone marrow, Kidney, Liver

Diesel fuel

Unknown: Target Organ(s): Kidney  
Repeated and prolonged overexposure to diesel fuel may cause degenerative changes in the liver, kidneys, and bone marrow.

Kerosene

Prolonged and repeated overexposure to kerosene and similar petroleum distillates may cause degenerative changes in the liver, kidneys, and bone marrow.

Diesel fuel

Unknown: Target Organ(s): Central nervous system.

|                                   |
|-----------------------------------|
| <b>12. Ecological information</b> |
|-----------------------------------|

**Ecotoxicity**
**Fish**

Kerosene

LC 50 (Not reported, 4 d): > 100 mg/l

Kerosene

LC 50 (Golden Orfe, 4 d): > 100 mg/l

**Aquatic Invertebrates**

Kerosene

EC 50 (Water flea (Daphnia magna), 2 d): > 1,000 mg/l

**Toxicity to Aquatic Plants**

Kerosene

EC 50 (Alga, 4 d): > 1,000 mg/l

**Toxicity to soil dwelling organisms**

No data available

No data available

No data available

**Toxicity to Above-Ground Organisms**

No data available

No data available

**Persistence and Degradability**
**Biodegradation**

Kerosene

OECD TG 301 F, 63 %, 28 d, Readily biodegradable

Kerosene

OECD TG 301 F, 63 %, 28 d, Readily biodegradable

**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.(Diesel fuel) |
| Transport Hazard Class(es)    |                                                                  |
| Class:                        | 9                                                                |
| Label(s):                     | 9                                                                |
| Packing Group:                | III                                                              |
| Marine Pollutant:             | Yes                                                              |
| Special precautions for user: | None established                                                 |

**IMDG**

|                               |                                                                  |
|-------------------------------|------------------------------------------------------------------|
| UN Number:                    | UN 3082                                                          |
| UN Proper Shipping Name:      | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diesel fuel) |
| Transport Hazard Class(es)    |                                                                  |
| Class:                        | 9                                                                |
| Label(s):                     | 9                                                                |
| EmS No.:                      | F-A, S-F                                                         |
| Packing Group:                | III                                                              |
| Marine Pollutant:             | Yes                                                              |
| Limited quantity              | 5.00L                                                            |
| Excepted quantity             | E1                                                               |
| Special precautions for user: | None established                                                 |

**IATA**

|                               |                                                                  |
|-------------------------------|------------------------------------------------------------------|
| UN Number:                    | UN 3082                                                          |
| Proper Shipping Name:         | Environmentally hazardous substance, liquid, n.o.s.(Diesel fuel) |
| Transport Hazard Class(es):   |                                                                  |
| Class:                        | 9                                                                |
| Label(s):                     | 9MI                                                              |
| Marine Pollutant:             | Yes                                                              |
| Packing Group:                | III                                                              |
| Limited quantity              | 30.00KG                                                          |
| Excepted quantity             | E1                                                               |
| Environmental Hazards         | Marine Pollutant                                                 |
| Special precautions for user: | None established                                                 |
| Other information             |                                                                  |
| Passenger and cargo aircraft: | Allowed.                                                         |
| Cargo aircraft only:          | Allowed.                                                         |

**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

Delayed (Chronic) Health Hazard

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

## 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.

Naphthalene

2.00PPM

## Inventory Status

### Australia (AICS)

This product contains a substance that is not listed on the Australia Inventory of Chemical Substances.

### Canada (DSL/NDSL)

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

### China (IECSC)

This product contains a substance that is not listed on the Chinese Inventory of Existing Chemical Substances (IECSC).

### 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)

This product requires notification before sale in Korea.

### New Zealand (NZIoC)

This product requires notification before sale in New Zealand.

### Philippines (PICCS)

This product requires notification before sale in the Philippines.

### Switzerland (SWISS)

This product contains a substance that is not listed on the Switzerland Inventory of Notified New Substances.

### Taiwan (TCSCA)

May require 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.*

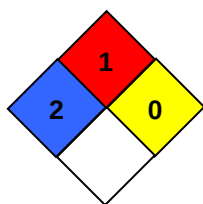
## 16. Other information, including date of preparation or last revision

### HMIS Hazard ID

|                  |   |   |
|------------------|---|---|
| Health           | * | 2 |
| Flammability     |   | 1 |
| 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

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue Date:</b>            | 03/24/2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Version #:</b>             | 2.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source of information:</b> | Internal company data and other publically available resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Further Information:</b>   | Contact supplier (see Section 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Disclaimer:</b>            | As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user. |