1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier – UtilityFlame
Product Number – NR
Chemical Name – Mixture
Trade name – Milpack UtilityFlame
CAS No. – Mixture

Manufacturer/Supplier Information (USA)
Company Identification – Milpack Ventures, LLC D.B.A. UtilityFlame
USA Telephone – (813) 205-5604
USA Address – 6089 John's Road, Suite 7, Tampa, FL 33634
Emergency telephone number – Chemtrec
Emergency Phone No. - (800) 424-9300 (US/Canada), (703) 527-3887 (Intl.)

2 - HAZARDS IDENTIFICATION

WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM) – Hazardous under WHMIS regulations in Canada. Class D2B - Irritant
GHS (USA/CANADA) – Hazardous under GHS regulations.

Hazard Pictogram(s) | Signal Word(s) | Warning
--- | --- | ---
H302 | Warning | Harmful if swallowed.
H316 | | Causes mild skin irritation.
H320 | | Causes eye irritation.
P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional Information
Potential Health Effects
Inhalation | Possible irritation of respiratory tract.
Skin Contact | Possible mild irritation.
Eye Contact | Eye irritation.
Ingestion | Harmful if swallowed, Irritating, significant exposure may result in unconsciousness and death. Repeated ingestion may cause kidney toxicity.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>GHS Hazard Pictogram(s) and Hazard Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siloxanes and Silicones di-Me, reaction products with silica</td>
<td>&lt;10</td>
<td>67762-90-7</td>
<td>Not referenced</td>
<td>None</td>
</tr>
</tbody>
</table>

Additional Information - For full text of H phrases see section 16. Non-Hazardous ingredients are not listed and make up the balance of the product.
### 4 - FIRST AID MEASURES

**Inhalation**
Remove patient from exposure. Keep patient at rest and give oxygen if breathing difficult. If symptoms develop, obtain medical attention.

**Skin Contact**
Remove contaminated clothing immediately and drench affected skin with plenty of water.

**Eye Contact**
Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain medical attention if ill effects occur.

**Ingestion**
Do not induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

**Further Medical Treatment**
Treat symptomatically. No specific measures should be required. None known.

### 5 - FIRE-FIGHTING MEASURES

**Combustible.** Flash Point 244°F / 117.78°C. T.C.C. NFPA (USA National Fire Protection Association); Health – 1, Flammability – 1, Reactivity- 0.

**Extinguishing media**
Water fog, Alcohol Foam, Dry Chemical, CO2

**Unsuitable Extinguishing Media**
None

**Fire Fighting Protective Equipment**
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

**Special Hazards arising from Combustion**
None known or anticipated

### 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions**
Ensure full personal protection (including respiratory protection) during removal of spillages.

**Environmental Exposure Controls**
Cover with absorbent or contain. Collect and dispose.

**Other**
Permanent damage is unlikely. Product is non-hazardous to aquatic organisms.

### 7 - HANDLING AND STORAGE

**HANDLING**
Avoid contact with eyes. Avoid ingestion. Avoid inhalation of high concentrations of vapours.

**STORAGE**
Keep container tightly closed. Keep out of the reach of children. Avoid storage with water-reactive substances, strong acids, and strong bases.

**Storage Temperature:**
Ambient. Avoid contact with heat and ignition sources.

**Storage Life:**
Stable at ambient temperatures.

**Specific use:**
Not applicable.

### 8 - EXPOSURE CONTROLS/PERSOAL PROTECTION

**PERSONAL PROTECTIVE EQUIPMENT**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respirators</td>
<td>Not normally required.</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Wear protective eyewear (goggles, face shield, or safety glasses).</td>
</tr>
<tr>
<td>Gloves</td>
<td>Wear suitable gloves if prolonged skin contact is likely.</td>
</tr>
<tr>
<td>Body protection</td>
<td>Not normally required.</td>
</tr>
<tr>
<td>Engineering Controls</td>
<td>Not normally required.</td>
</tr>
<tr>
<td>Other</td>
<td>Contaminated clothing should be thoroughly cleaned.</td>
</tr>
</tbody>
</table>
OCCUPATIONAL EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>USA workplace environmental exposure levels (WEEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene Glycol</td>
<td>NE</td>
<td>10mg/m³</td>
<td>USA workplace environmental exposure levels (WEEL)</td>
</tr>
<tr>
<td>As Amorphous Silica Dust or particles NOS</td>
<td>10 mg/m³, inhalable 6mg/m³, respirable</td>
<td>6 mg/m³</td>
<td>USA</td>
</tr>
</tbody>
</table>

9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- **Appearance**: Liquid.
- **Colour**: No data
- **Odour**: Slight
- **Odour Threshold (ppm)**: Not available
- **pH (Value)**: 5.0-8.0 @ 500 g/l @20°C (68°F)
- **Melting Point (°C) / Freezing Point (°C)**: -10°C / 14°F
- **Boiling point/boiling range (°C)**: ~ 245°C / 473°F
- **Flash Point (°C)**: 118°C /244°F, T.C.C.
- **Evaporation rate**: Not available
- **Flammability (solid, gas)**: Not available
- **Explosive limit ranges** – LEL 2%Vol., UEL 12.3%Vol.
- **Vapour Pressure (mm Hg)**: 0.04hPa (0.03 mmHg)
- **Vapour Density (Air=1)**: ~ 3.66
- **Density (g/ml)**: ~ 1.118 g/ml at 25°C (77°F)
- **Solubility (Water)**: Miscible.
- **Solubility (Other)**: Not established
- **Partition Coefficient (n-Octanol/water)**: Not available
- **Ignition Temperature (°C)**: 228°C (442°F)
- **Decomposition Temperature (°C)**: Not available
- **Viscosity (mPa.s)**: Not available
- **Explosive properties**: Not explosive
- **Oxidising properties**: Not oxidising

10 - STABILITY AND REACTIVITY

- **Reactivity**: Slight
- **Chemical stability**: Stable under normal conditions.
- **Possibility of hazardous reactions**: Can react violently if in contact with - Water-Reactive Substances, Strong Acids, Strong Oxidizers, Zinc.
- **Conditions to avoid**: Extreme Temperatures
- **Incompatible materials**: Water-Reactive Chemicals, Strong Acids, Strong Bases.
- **Hazardous Decomposition Product(s)**: Carbon monoxide, Carbon dioxide.

11 - TOXICOLOGICAL INFORMATION

- **Acute toxicity**: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.
- **Irritation**: May cause eye irritation under prolonged exposure.
- **Corrosivity**: None expected.
- **Sensitization**: None expected.
- **Repeated dose toxicity**: No data available.
- **Carcinogenicity**: None expected.
- **Mutagenicity**: None expected.
- **Toxicity for reproduction**: None expected.
- **Aspiration hazard**: None expected.

Potential Health Effects

- **Inhalation**: None anticipated.
- **Ingestion**: Low acute oral toxicity. But drowsiness, dizziness, confusion, nausea, vomiting, and kidney injury may occur.
- **Skin**: Mild skin irritation
- **Eyes**: Mild eye irritation.
SUBSTANCE. | LD<sub>50</sub> (Oral, Rat) | LC<sub>50</sub> (Inhalation, Rat) | LD<sub>50</sub> (Dermal, Rat)
---|---|---|---
Diethylene Glycol | 12,565 mg/kg | No data | 11,890 mg/kg

12 - ECOLOGICAL INFORMATION

Toxicity | Low ecotoxicity - not harmful to aquatic environments.
Persistence and degradability | Unlikely to persist.
Bioaccumulative potential | The product has low potential for bioaccumulation.
Mobility in soil | The product has high mobility in sediment.
Other adverse effects | None anticipated.

13 - DISPOSAL CONSIDERATIONS

Waste treatment methods - Disposal should be in accordance with local, state or national legislation. Product does not require any special disposal or handling.

14 - TRANSPORT INFORMATION

Land Transport (Within USA) (a)(c) | Land Transport (Within Canada) (b)(c)
---|---
UN number | Not regulated | UN number | Not regulated
Proper Shipping Name | None | Proper Shipping Name | None
Transport hazard class(es) | None | Transport hazard class(es) | None
Packing Group | None | Packing Group | None
Hazard label(s) | None | Hazard label(s) | None
Environmental hazards | None | Environmental hazards | None
Special precautions for user | None | Special precautions for user | None

Sea Transport (IMDG) (c) | Air Transport (ICAO/IATA) (c)
---|---
UN number | Not regulated | UN number | Not regulated
Proper Shipping Name | None | Proper Shipping Name | None
Transport hazard class(es) | None | Transport hazard class(es) | None
Packing Group | None | Packing Group | None
Marine Pollutant | None | Environmental hazards | None
Special precautions for user | None | Special precautions for user | None

(a)- ORM-D may be applicable within the USA for package sizes less than 30kg.
(b)– Shipments into Canada from the US may use USDOT rules per TDG SP 1.33.
(c)– Consult with transport provider. Check relevant regulations for Special Provisions.

15 - REGULATORY INFORMATION

USA
TSCA (Toxic Substance Control Act) - All Components Listed.
SARA 302 - Extremely Hazardous Substances - Not applicable.
SARA 313 - Toxic Chemicals – None.
SARA 311/312 - Hazard Categories – Acute health hazard, Chronic Health Hazard
CERCLA (Comprehensive Environmental Response Compensation and Liability Act) - No RQ.
CWA (Clean Water Act) - CWA 307 - Priority Pollutants - None
CAA (Clean Air Act 1990) - CAA 112 - Hazardous Air Pollutants (HAP) - None
Proposition 65 (California) - No Listings.
State Right to Know Lists - CAS # 111-46-6 Diethylene glycol listed in NJ, PA.

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New Issue
Canada
WHMIS Classification (Canada) - None
CANADA INGREDIENT DISCLOSURE LIST - None
Canada (DSL/NDSL) - All Components Listed on DSL or NDSL.

16 - OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

LEGEND
ACGIH American Conference of Governmental Industrial Hygienists
AICS Australian Inventory of Chemical Substances
ANSI American National Standards Institute
atm atmosphere (pressure unit)
BOD biological oxygen demand
CAS Chemical Abstracts Service
CC closed cup
CDTA Chemical Drug and Trafficking Act
COC Cleveland Open Cup
COD chemical oxygen demand
coeff. coefficient
CFR Code of Federal Regulations
CPR cardio-pulmonary resuscitation
DEA Drug Enforcement Agency
DOT Department of Transportation
DSCL Dangerous Substances Classification and Labeling
EEC European Economic Community
FDA Food and Drug Administration
HMIS Hazardous Materials Information System
IARC International Agency for Research on Cancer
IDLH immediate danger to life or health
kg kilogram
L liter
LC50 median lethal concentration
LD50 median lethal dose
LEL lower explosive limit
mg milligram

References: RTECS, CAS Registry, EINECS/ESIS, Casarett & Doull's Toxicology, Goldfranks's Toxicological Emergencies, Manufacturer Information

GHS Hazard statement(s) And Precautionary statement(s)
H302-Harmful if swallowed.
H316 Causes mild skin irritation.
H320 Causes eye irritation
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional Information – None.

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