SECTION 1: Product and company identification

Product name: Gel Bleach Multi-Purpose Chlorinated Cleaner  
Use of the substance/mixture: Cleaner  
Product code: 0691  
Company: Total Solutions  
P.O. Box 240014  
Milwaukee, WI 53224 - USA  
T (414) 354-6417  
Emergency number: Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Met. Corr. 1 H290  
Skin Corr. 1A H314

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US):  
Signal word (GHS-US): Danger  
Hazard statements (GHS-US): May be corrosive to metals  
Causes severe skin burns and eye damage  
Precautionary statements (GHS-US): Keep only in original container.  
Do not breathe mist, spray.  
Wash thoroughly after handling  
Wear eye protection, protective clothing, protective gloves.  
If swallowed: rinse mouth. Do NOT induce vomiting  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
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  
Immediately call a doctor, a POISON CENTER  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material-damage.  
Store locked up.  
Store in corrosive resistant container with a resistant inner liner.  
Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| potassium hydroxide    | (CAS-No.) 1310-58-3| 1-5| Met. Corr. 1, H290  
Acute Tox. 3 (Oral), H301  
Skin Corr. 1A, H314 |
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact: Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: Causes severe skin burns and eye damage.

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.


4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Heat and acid contamination will produce irritating and toxic fumes. May decompose, generating irritating chlorine gas.

Reactivity: Thermal decomposition may produce chlorine, sodium oxide, oxygen, oxides of chlorine, sodium chlorate, and hydrogen.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel


Emergency procedures: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution.

6.3. Methods and material for containment and cleaning up

For containment: Contain released product, pump into suitable containers.

Methods for cleaning up: This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.

Hygiene measures: Wash thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.
Storage conditions: Keep container closed when not in use.
Information on mixed storage: (strong) acids.
Storage area: Meet the legal requirements. Store in a dry area. Store in a cool area.
Special rules on packaging: meet the legal requirements. Keep only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Potassium hydroxide (1310-58-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>ACGIH</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Personal protective equipment: Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>translucent. gel. Liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>chlorine-like</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>12 - 13</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °F Closed Cup</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1.03 g/ml</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
VOC content: 0%

SECTION 10: Stability and reactivity

10.1. Reactivity
Thermal decomposition may produce chlorine, sodium oxide, oxygen, oxides of chlorine, sodium chlorate, and hydrogen.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid
No additional information available

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Heat and acid contamination will produce irritating and toxic fumes. May decompose, generating irritating chlorine gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

Potassium hydroxide (1310-58-3)
LD50 oral rat: 273 mg/kg (Rat)
ATE CLP (oral): 273 mg/kg body weight
Skin corrosion/irritation: Causes severe skin burns and eye damage.
  pH: 12 - 13
Serious eye damage/irritation: Not classified
  pH: 12 - 13
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity – single exposure: Not classified
Specific target organ toxicity – repeated exposure: Not classified
Aspiration hazard: Not classified
Symptoms/effects after inhalation: May cause respiratory irritation.
Symptoms/effects after skin contact: Caustic burns/corrosion of the skin.
Symptoms/effects after eye contact: Causes serious eye damage. Corrosion of the eye tissue. Permanent eye damage.

SECTION 12: Ecological information

12.1. Toxicity
Potassium hydroxide (1310-58-3)
LC50 fish 1: 80 mg/l (96 h, Gambusia affinis)

12.2. Persistence and degradability
Potassium hydroxide (1310-58-3)
Persistence and degradability: Biodegradability: not applicable.
Biochemical oxygen demand (BOD): Not applicable
Chemical oxygen demand (COD): Not applicable
Gel Bleach Multi-Purpose Chlorinated Cleaner
Safety Data Sheet

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>ThOD</th>
<th>BOD (% of ThOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>potassium hydroxide (1310-58-3)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>potassium hydroxide (1310-58-3)</td>
<td>Not bioaccumulative</td>
</tr>
</tbody>
</table>

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**Product/Packaging disposal recommendations**: Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

| Transport document description | UN1760 Corrosive liquids, n.o.s. (Sodium Hypochlorite, Potassium Hydroxide), 8, II |
| UN-No.(DOT) | UN1760 |
| Proper Shipping Name (DOT) | Corrosive liquids, n.o.s. |
| Class (DOT) | 8 - Class 8 - Corrosive material 49 CFR 173.136 |
| Hazard labels (DOT) | 8 - Corrosive |

**Packing group (DOT)**: II - Medium Danger

**DOT Packaging Non Bulk (49 CFR 173.xxx)**: 202

**DOT Packaging Bulk (49 CFR 173.xxx)**: 242

**DOT Symbols**: G - Identifies PSN requiring a technical name

**DOT Special Provisions (49 CFR 172.102)**: B2, IB2, T1, TP2, TP27

**DOT Packaging Exceptions (49 CFR 173.xxx)**: 154

**DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)**: 1 L

**DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)**: 30 L

**DOT Vessel Stowage Location**: B

**DOT Vessel Stowage Other**: 40 - Stow “clear of living quarters”

#### Additional information

**Emergency Response Guide (ERG) Number**: 154

**Other information**: When transported by ground, this product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.154. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may be required.

**ADR**: No additional information available

**Transport by sea**: No additional information available

**Air transport**: No additional information available

### SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CERCLA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>potassium hydroxide (1310-58-3)</td>
<td>1000 lb</td>
</tr>
<tr>
<td>sodium hypochlorite (7681-52-9)</td>
<td>100 lb</td>
</tr>
</tbody>
</table>

**WARNING**
This product can expose you to benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**SECTION 16: Other information**

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H272</td>
<td>May intensify fire; oxidizer</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

NFPA health hazard: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity: 0 - Material that in themselves are normally stable, even under fire conditions.

Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.