1 Identification

- **Product name:** Cleaning Solution, GP (Undiluted)
- **Part number:** 95-10230, -10235
- **Application of the substance / the mixture** Alkaline cleaner/ detergent
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Allied High Tech Products Inc.
    2376 East Pacifica Place
    USA-RANCHO DOMINGUEZ, CA 90220
    USA
    info@alliedhightech.com
- **Information department:** Product safety department
- **Emergency telephone number:**
  - During normal opening times: +1 (310) 635-2466
  - Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

- **Classification of the substance or mixture**

  ![GHS05 Corrosion](image)

  **Skin Corr. 1B** H314 Causes severe skin burns and eye damage.
  **Eye Dam. 1** H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

  ![GHS05](image)

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - disodium metasilicate
- **Hazard statements**
  - Causes severe skin burns and eye damage.
  - **Precautionary statements**
  - Do not breathe dusts or mists.

(Contd. on page 2)
**Product name:** Cleaning Solution, GP (Undiluted)

Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
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 poison center/doctor.
Specific treatment (see on this label).
Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**

- **NFPA ratings (scale 0 - 4):**
  - Health = 2
  - Fire = 1
  - Reactivity = 0

- **HMIS-ratings (scale 0 - 4):**
  - HEALTH
  - Health = 2
  - FIRE
  - Fire = 1
  - REACTIVITY
  - Reactivity = 0

**Other hazards**
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

**Hazardous Components:**

- 111-76-2 ethylene glycol monobutyl ether:
  - Acute Tox. 3, H331; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315;
  - Eye Irrit. 2A, H319; Flam. Liq. 4, H227
  - 2.5-10%

- 6834-92-0 disodium metasilicate:
  - Skin Corr. 1B, H314; Acute Tox. 4, H302; STOT SE 3, H335
  - 2.5-10%

**Non-hazardous Components:**

- 7732-18-5 water, distilled, conductivity or of similar purity
  - 50-100%

### 4 First-aid measures

- **Description of first aid measures**
  - **General information:** Immediately remove any clothing soiled by the product.
  - **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
  - **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  - Do not allow to enter sewers/surface or ground water.
  - Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Use neutralizing agent.
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

- Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>ethylene glycol monobutyl ether</td>
<td>60 ppm</td>
</tr>
<tr>
<td>6834-92-0</td>
<td>disodium metasilicate</td>
<td>3.8 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>ethylene glycol monobutyl ether</td>
<td>120 ppm</td>
</tr>
<tr>
<td>6834-92-0</td>
<td>disodium metasilicate</td>
<td>42 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>ethylene glycol monobutyl ether</td>
<td>700 ppm</td>
</tr>
<tr>
<td>6834-92-0</td>
<td>disodium metasilicate</td>
<td>250 mg/m³</td>
</tr>
</tbody>
</table>

7 Handling and storage

- Handling:
  - Precautions for safe handling: No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters

- Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Long-term value</th>
<th>REL Long-term value</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 ethylene glycol monobutyl ether</td>
<td>240 mg/m³, 50 ppm</td>
<td>24 mg/m³, 5 ppm</td>
<td>97 mg/m³, 20 ppm</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
<td>Skin</td>
<td>BEI</td>
</tr>
<tr>
<td>6834-92-0 disodium metasilicate</td>
<td>15 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEL Long-term value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV Long-term value</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Substance</th>
<th>BEI Limit value</th>
<th>Medium</th>
<th>Time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2 ethylene glycol monobutyl ether</td>
<td>200 mg/g creatinine</td>
<td>urine</td>
<td>end of shift</td>
<td>Butoxyacetic acid with hydrolysis</td>
</tr>
</tbody>
</table>

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
- Personal protective equipment:

- General protective and hygienic measures:
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Avoid contact with the eyes.
  - Avoid contact with the eyes and skin.
- Breathing equipment: Not required.
- Protection of hands:

  Protective gloves

- Material of gloves
  - Neoprene gloves
  - Nitrile rubber, NBR

- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  
  - Appearance:
    - Form: Liquid
    - Color: Red
    - Odor: Fruit-like
    - Odor threshold: Not determined.
  
  - pH-value at 20 °C (68 °F): 12

- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.

- Flammability (solid, gaseous): Not applicable.

- Decomposition temperature: Not determined.

- Auto igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

- Density: Not determined.

- Relative density
  - 1.06

- Vapor density: Not determined.

- Evaporation rate: Not determined.

- Solubility in / Miscibility with
  - Water: Fully miscible.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.

- Solvent content:
  - Organic solvents: 10.0 %
  - Water: 80.0 %
  - VOC content: 10.0 %
  - 100.0 g/l / 0.83 lb/gl

  (Contd. on page 6)
### 10 Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**
  - **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
  - **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**
  - Keep away from oxidising agents and acidic substances.
  - Keep away from open flames. - No smoking.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**:
  - **ATE (Acute Toxicity Estimate)**
    | Route   | LD50/LC50     |
    |---------|--------------|
    | Oral    | 6,864 mg/kg (rat) |
    | Dermal  | 4,000 mg/kg (rab)   |
    | Inhalative | 22 mg/l (rat) |
  - **111-76-2 ethylene glycol monobutyl ether**
    | Route   | LD50/LC50     |
    |---------|--------------|
    | Oral    | 1,480 mg/kg (rat) |
    | Dermal  | 400 mg/kg (rab)   |
    | Inhalative | 2.2 mg/l (rat) |
  - **6834-92-0 disodium metasilicate**
    | Route   | LD50/LC50     |
    |---------|--------------|
    | Oral    | 1,280 mg/kg (rat) |
- **Primary chemical irritant effect**:
  - **on the skin**: Caustic effect on skin and mucous membranes.
  - **on the eye**: Strong caustic effect. Strong irritant with the danger of severe eye injury.
  - **Sensitization**: No sensitizing effects known.
- **Additional toxicological information**:
  - Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - 111-76-2 ethylene glycol monobutyl ether: 3
  - **NTP (National Toxicology Program)**
    - None of the ingredients is listed.
12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
  - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation: Contact waste processors for recycling information.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- UN-Number
  - DOT, IMDG, IATA UN3266
- UN proper shipping name
  - DOT Corrosive liquid, basic, inorganic, n.o.s.
  - IMDG, IATA CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
**Product name:** Cleaning Solution, GP (Undiluted)

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
</tr>
</tbody>
</table>

**DOT Class**

- 8 Corrosive substances

**IMDG, IATA Class**

- 8 Corrosive substances

**Packing group**

- DOT, IMDG, IATA

- II

**Environmental hazards:**

- Marine pollutant: No

**Special precautions for user**

- Warning: Corrosive substances
- EMS Number: F-A,S-B
- Segregation groups: Alkalis

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

- Not applicable.

**UN "Model Regulation":**

- UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, II

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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

  - Sara

  **Section 355 (extremely hazardous substances):**

  - None of the ingredients is listed.

  **Section 313 (Specific toxic chemical listings):**

  - 111-76-2 ethylene glycol monobutyl ether

  **TSCA (Toxic Substances Control Act):**

  - All ingredients are listed.

  **Proposition 65**

  - Chemicals known to cause cancer:
    - None of the ingredients is listed.

  - Chemicals known to cause reproductive toxicity for females:
    - None of the ingredients is listed.

  - Chemicals known to cause reproductive toxicity for males:
    - None of the ingredients is listed.

  - Chemicals known to cause developmental toxicity:
    - None of the ingredients is listed.
Product name: Cleaning Solution, GP (Undiluted)

- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    - 111-76-2 ethylene glycol monobutyl ether NL
  - TLV (Threshold Limit Value established by ACGIH)
    - 111-76-2 ethylene glycol monobutyl ether A3
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.
  - **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environment protection department.
- **Contact:** Kim Dermit
- **Date of preparation / last revision** 06/13/2018 / -
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flam. Liq. 4: Flammable liquids – Category 4
  - Acute Tox. 4: Acute toxicity – Category 4
  - Acute Tox. 3: Acute toxicity – Category 3
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Dam. 1: Serious eye damage/eye irritation – Category 1
  - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3