Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name: Cleaning Pen (99.7%)

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Product use: Technical Cleaning

1.3 Details of the supplier of the safety data sheet
   Distributor: Uline Shipping Supplies
                12575 Uline Drive
                Pleasant Prairie, WI 53158
   Information telephone number: 1(800) 295-510

1.4 Emergency telephone number:
   Emergency spill information: Call CHEMTREC +1 (800) 424-9300

SDS date of preparation: 17 January 2013
SDS Revision Number: 3

Section 2. Hazards identification

This product is a clear liquid with a slight alcohol odor impregnated on a cellulose pad, polypropylene pad or felt pen core. There is a small amount of liquid on the pads and no free liquid in the packages.

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Physical classification:</th>
<th>Health classification:</th>
<th>Environmental classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Eye Irritation - Category 2A</td>
<td>None</td>
</tr>
</tbody>
</table>


2.2. Label elements

Warning!
Contains Isopropanol

Hazard phrases
H319 Causes serious eye irritation.

Precautionary phrases
P264 Wash exposed skin thoroughly after handling.
P280 Wear eye protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards: None

Section 3. Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>EINECS#</th>
<th>EU classification (67/548/EEC):</th>
<th>GHS classification Regulation (EC) No 1272/2008</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>F, Xi R11, R36, R67</td>
<td>Flamm Liq 2 (H225) Eye Irrit 2 (H319) STOT SE 3 (H336)</td>
<td>&lt;60%</td>
</tr>
</tbody>
</table>

See Section 16 for further information on EU and GHS classification.

1/24
Section 4. First-aid measures

4.1 Description of first-aid measures
   **Eye contact:** If contact occurs, immediately flush eyes with water for 15 minutes, holding the eye lids open to be sure the material is washed out. Get medical attention if irritation persists.
   **Skin contact:** No first aid should be required. If skin irritation develops, discontinue use and seek medical attention.
   **Inhalation:** If symptoms develop move to fresh air. Get medical attention if irritation persists or other symptoms persist.
   **Ingestion:** Ingestion is unlikely for solid products. No first aid is required for small amounts transferred from hands to mouth.

4.2 Most important symptoms and effects, both acute and delayed: No effects expected. May cause slight eye and skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed: None required.

Section 5. Firefighting measures

5.1 Extinguishing media:
   Use water fog, carbon dioxide, or dry chemical.

5.2 Special hazards arising from the substance or mixture
   **Unusual fire and explosion hazards:** Product will burn under fire conditions. Alcohol saturant may ignite if exposed to flame or hot surfaces when damp. Keep away from sparks, flame and hot surface.
   **Hazardous decomposition products:** Combustion may produce oxides of carbon.

5.3 Advice for firefighters:
   Firefighters should always wear self-contained breathing apparatus and full protective clothing for fires involving chemicals or in confined spaces. Cool fire exposed containers with water.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
   None required.

6.2 Environmental precautions:
   Report spill as required by local and federal regulations.

6.3 Methods and material for containment and cleaning up:
   Pick up wipe and place into an appropriate container for disposal. Do not place into containers where ignition sources such as cigarettes or other ignition sources may be discarded.

6.4 Reference to other sections:
   Refer to Section 8 for protective equipment and Section 15 for disposal considerations.

Section 7. Handling and storage

7.1 Precautions for safe handling:
   Avoid contact with the eyes. Avoid breathing vapors. Do not smoke when handling.

7.2 Conditions for safe storage, including any incompatibilities:
   Avoid excessive heat and flames.

7.3 Specific end use(s):
   Technical Cleaning.
Section 8. Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Exposure limits</th>
<th>Biological limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>400 ppm – OSHA PEL</td>
<td>None established.</td>
</tr>
<tr>
<td></td>
<td>200 ppm – TWA ACGIH TLV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>400 ppm – STEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>200 ppm – TWA DFG MAK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>400 ppm – TWA UK WEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>500 ppm – STEL UK WEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>400 ppm – TWA AU OEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>500 ppm – STEL AU OEL</td>
<td></td>
</tr>
</tbody>
</table>

Refer to local regulations if exposure limits are not listed above.

8.2 Exposure controls

Engineering controls: General ventilation is adequate under normal conditions of use.
Respiratory protection: None required for normal use.
Skin protection: None required.
Eye protection: None required.
Other: None required.

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>Appearance</td>
<td>Clear liquid with an alcohol odor impregnated on a cellulose pad, fabric pad, or felt pen core.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>2.1 (isopropanol)</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.78</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Saturant – infinite solubility</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>n-octanol/water: Not available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>-121°F (-85°C) (isopropanol)</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>&gt;662°F (&gt;350°C)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>54°F (12°C) (isopropanol)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>1.2 (butyl acetate =1)</td>
</tr>
<tr>
<td>Explosion properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Flammable limits</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not oxidizing</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>32.29 mmHg @ 20°C (isopropanol)</td>
</tr>
<tr>
<td>VOC content</td>
<td>No data available</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>No data available</td>
</tr>
<tr>
<td>Release of invisible vapors and gases</td>
<td>Yes</td>
</tr>
</tbody>
</table>

9.2 Other information:

None

Section 10. Stability and reactivity

10.1 Reactivity:
Not reactive under normal conditions of use.

10.2 Chemical stability:
Stable under normal storage and handling conditions.

10.3 Possibility of hazardous reactions:
None known.

10.4 Conditions to avoid:
Avoid heat, sparks, and open flames.

10.5 Incompatible materials:
Avoid oxidizing agents, aldehydes, chlorine, ethylene oxide, acids, and isocyanates.

10.6 Hazardous decomposition products:
Thermal decomposition may produce carbon oxides.
11.1 Information on toxicological effects

Eye contact: Direct contact with the liquid may cause eye irritation with redness, tearing, and stinging.

Skin contact: Prolonged skin contact may cause irritation, drying, and dermatitis.

Inhalation: Inhalation of vapors may cause upper respiratory tract irritation and central nervous system effects including headache, dizziness, drowsiness, or confusion.

Ingestion: This product contains only a small amount of liquid. No adverse effects are expected.

Acute toxicity values:
Isopropanol: LD50 oral rat - 5,045 mg/kg; LC50 inhalation rat - 16,000 ppm/8 hr; LD50 skin rabbit - 12,800 mg/kg

Irritation: Isopropanol is an eye irritant.

Corrosivity: This is not a corrosive product.

Sensitization: This product is not expected to cause sensitization.

Repeat dose toxicity: F344 rat and CD-1 mice were exposed to 0, 100, 500, 1500, or 5000 ppm isopropanol for 13 weeks. Signs of narcosis were observed in the 5000 ppm isopropanol groups only. Increased body weight and/or body weights gain were observed for rats of the 1500- and 5000-ppm groups as well as female mice of the 5000-ppm group compared to control animals. Changes to food and water consumption generally corresponded to changes in body weight. Increased relative liver weights for both sexes of rats and female mice of the 5000-ppm group and increased size and frequency of hyaline droplets within the kidneys of exposed male rats were observed.

Carcinogen status: None of the components are listed as a carcinogen by IARC, NTP, ACGIH, OSHA or EU Substances Directive.

Germ cell mutagenicity: In an in-vivo study, isopropanol did not induce micronuclei in bone marrow of mice. Studies conducted in mammalian cells in vitro, it did not induce sister chromatid exchanges or gene mutations. Isopropanol did not induce aneuploidy in Neurospora crassa study. It was not mutagenic to bacteria.

Toxicity for reproduction: Isopropyl alcohol was given continuously in drinking water in doses of 1.5, 1.4, & 1.3 g/kg body wt/day to parents and to two successive generations of rats, respectively. Neither growth, reproductive function nor embryonic or postnatal development was affected, except for some retardation of growth early in life of first generation rats.

12.1 Toxicity:
This product contains less than 3 grams of liquid on the pads and no free liquid in the package. No adverse effects on the aquatic environment are expected.
Isopropanol: 96 hr LC50 fathead minnow - 6,120 mg/L; 48 hr LC50 brown shrimp - 1400 mg/L

12.2 Persistence and degradability:
Isopropanol: Readily biodegradable.

12.3 Bioaccumulative potential:
Not expected to bioaccumulate.

12.4 Mobility in soil:
No data available.

12.5 Results of PBT and vPvB assessment:
Not required.

12.6 Other adverse effects:
None known.

13.1 Waste treatment methods:
Safe handling and disposal method: Discard used product in an appropriate container. Do not place into containers where ignition sources such as cigarettes or other ignition sources may be discarded.

Disposal of contaminated packaging: Discard empty packaging in trash.

Environmental regulations: Dispose in accordance with all local, state and national regulations.
Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
<td>Not regulated. (49 CFR 172.102 Special Provision 47)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU ADR/RID</td>
<td>Not regulated. (Special Provision 216)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated. (Special Provision 216)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICAO</td>
<td>Not regulated. (Special Provision A46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.6 Special precautions for user:
None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
Not applicable.

Section 15. Regulatory information

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

**US Regulatory Information:**
EPA SARA 311 hazard classification: Acute Health

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313: None

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product does not contain chemicals regulated under California Proposition 65.

**Canadian Regulatory Information:**

WHMIS classification: Class D - Division 2B - (Toxic material causing other chronic effects.)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List.

**Australian Regulations:**
Montreal Protocol (Ozone Depleting Substances): None present.
The Stockholm Convention (Persistent Organic Pollutants): None present.
The Rotterdam Convention (Prior Informed Consent): Not applicable.
Basel Convention: Not applicable.
International Convention for the Prevention of Pollution from Ships (MARPOL): Not applicable.
Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): No ingredients are listed.

**International inventories:**
European Union: All of the ingredients are listed on the European Inventory of New and Existing Chemical Substances (EINECS).
Australia: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances (AICS).
China: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).
Korea: All of the components of this product are listed on the Korean Existing Chemical List (KECL).
15.2 Chemical safety assessment:
Not required,

Section 16. Other information

SDS revision history:
10 February 2012: Converted US SDS to EU REACH SDS.
29 June 2012: Correction to exposure limits.
17 January 2013: Updated format

GHS phrases for reference (See sections 2 and 3):
H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness.

EU classes and risk phrases for reference (See sections 2 and 3):
F - Highly Flammable
Xi - Irritant
R11 - Highly flammable.
R36 - Causes eye irritation.
R67 - Vapors may cause drowsiness or dizziness.

This sheet was compiled from the latest available information and reliable sources. Procedures are based on accepted usage. They are not necessarily all-inclusive and may vary in every circumstance. We provide no warranties either expressed or implied and assumes no responsibility for the accuracy or completeness of the data herein.