1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: LVAPC Low VOC Wax & Grease Remover
Product Description: Surface Cleaners
Product Stock/Code: LVAPC / 8010  LVAPC5 / 8012
Chemical Family: Water-based Solvent / Solvant à base d’eau
Molecular Formula: Mixture / Mélange

Manufacturer / Supplier
Dominion Sure Seal Ltd.
6175 Danville Road, Mississauga
Ontario, Canada L5T 2H7
Customer Service: 905-670-5411

Emergency Telephone Numbers (24 hour)
CANUTEC : (613) 996-6666
CHEMTREC : (800) 424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

Immediate Concerns:
Flammable liquid and vapor. Causes serious eye irritation. Substance does not generally irritate and is only mildly irritating to the skin. Vapours may cause drowsiness and dizziness.

Potential Health Effects and Symptoms of Exposure

Eye Contact:
Contact causes serious eye irritation. Symptoms may include pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

Skin Contact:
Substance does not generally irritate and is only mildly irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Ingestion:
Substance may be harmful if swallowed.

Inhalation:
High gas, vapor, mist or dust concentrations may be harmful if inhaled. May cause headaches and dizziness. High vapor concentrations may cause drowsiness.

Signs and Symptoms of Overexposure

Effects of Long-Term (Chronic) Exposure:
Prolonged or excessive inhalation may cause respiratory tract irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Carcinogenicity:
No adverse carcinogenic effects are anticipated.

Mutagenicity:
No adverse mutagenic effects are anticipated.

Reproductive Toxicity
Reproductive Effects:
No adverse reproductive effects are anticipated.

Teratogenicity / Embryotoxicity:
No adverse teratogenic effects are anticipated.

Routes Of Entry:
Eye contact. Inhalation. Skin contact. Ingestion.

Sensitization:
Material is not expected to be a skin or respiratory sensitizer.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS No.</th>
<th>Wt.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits and Section 11 for ingredient Toxicity data.

**WHMIS Classification:**
Class B2: Flammable Liquids
Class D2B: Toxic Material - Eye irritation

### 4. FIRST AID MEASURES

**Eye Contact:**
Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**Skin Contact:**
Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing and wash before reuse.

**Ingestion:**
Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

**Inhalation:**
If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain medical attention if breathing difficulty persists.

**Additional Information:**
Not Available

### 5. FIRE FIGHTING MEASURES

**Flash Point and Method:**
15.5 °C Setaflash Closed Cup

**Flammable Limits:**
2.5 to 12.8

**Notes:** Based on data for acetone.

**Autoignition Temperature:**
No data available.

**Flammable Properties:**
Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Product can be ignited by static discharge.

**Extinguishing Media:**
Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Hazardous Combustion Products:
   During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Fire Fighting Procedures:
   Containers can build up pressure if exposed to heat (fire).

Fire Fighting Equipment:
   As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Sensitivity to Static Discharge:
   Product is sensitive to static discharge.

Sensitivity to Mechanical Impact:
   Product is not sensitive to mechanical impact.

6. ACCIDENTAL RELEASE MEASURES

Small Spill:
   Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Sweep up material being careful not to raise dust. Place in an appropriate disposal container and seal tightly.

Environmental Precautions

   Water Spill:
      Do not flush to sewer.

   Land Spill:
      Avoid runoff into storm sewers and ditches which lead to waterways.

Special Protective Equipment:
   Clean up spills immediately, observing precautions in Protective Equipment section 8.

7. HANDLING AND STORAGE

General Procedures:
   Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. Ensure thorough ventilation of stores and work areas.

Handling:
   Do not use in the presence of open flame or spark. Wear recommended personal protective equipment. Use only in a well ventilated area. Do not breath vapors. Avoid contact with eyes, skin, and clothing. After handling, always wash hands thoroughly with soap and water.

Storage:
   Keep away from heat, sparks and open flame. Protect from physical damage. Keep containers tightly closed, when not in use. Store in a cool place. Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Exposure Guidelines

### Individual Ingredient Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
<td>ppm</td>
</tr>
<tr>
<td>Acetone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td>750</td>
<td>1800</td>
<td>750</td>
</tr>
<tr>
<td>STEL</td>
<td>1000</td>
<td>2400</td>
<td>1000</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWA</td>
<td>400</td>
<td>980</td>
<td>400</td>
</tr>
<tr>
<td>STEL</td>
<td>500</td>
<td>1225</td>
<td>500</td>
</tr>
</tbody>
</table>

### Engineering Controls:
Good general ventilation should be sufficient to control airborne levels.

### Personal Protective Equipment

#### Eyes and Face:
Wear safety glasses with side shields (or goggles). Contact lenses should not be worn when working with this product. Eye wash fountains should be readily available to areas of use and handling.

#### Skin Contact:
Wear chemical resistant gloves.

#### Respiratory:
If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved, air-purifying filter, cartridge or canister.

#### Protective Clothing:
Wear protective clothing as necessary to prevent contact.

### Work Hygienic Practices:
Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

### 9. 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>Odor</td>
<td>Ketone</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Color</td>
<td>Colourless</td>
</tr>
<tr>
<td>pH</td>
<td>No data available.</td>
</tr>
<tr>
<td>% Volatiles</td>
<td>99+ % w/w</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>24 kPa (184 mm Hg) [Acetone] at 20°C</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>56 - 105 °C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td></td>
</tr>
</tbody>
</table>
LVAPC Low VOC Wax & Grease Remover

\[(n\text{-butyl acetate } = 1) > 1\]

**Density**

: \[0.98 \pm 0.02 \text{ g/ml at } 20^\circ C\]

**Viscosity**

: Not Available

**VOC Content**

: < 25 g/l, less exempt solvents [< 2.5% w/w]

**Partition Coefficient\((n\text{-octanol/water})\)**

: Not Available

**Odor Threshold**

: Not Available

**Oxidizing Properties**

: None

**Comments:**

**VOC Compliance Statement - LVAPC**

- **VOC Content:**
  - (as supplied): 25 g/l (0.2 lb/gal)
  - Density: \[0.98 \pm 0.02 \text{ g/ml}\]
  - Water Content: \[89.0 \pm 0.5 \% \text{ w/w}\]
  - Exempt Content: \[8.5 \pm 0.5 \% \text{ w/w (acetone)}\]

- **VOC Regulation:**
  - SCAQMD Rule 1143 – Consumer Paint Thinners & Multi-Purpose Solvents–California, USA
  - CARB Consumer Product Regulations
  - VOC Concentration Limits for Automotive Refinishing Products Regulations – Canada
  - SCAQMD Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations– California

- **Coating Category:**
  - Consumer Multi-Purpose Solvent
  - Multi-Purpose Solvent
  - Surface Cleaners

- **The product VOC content meets the 25 g/l (0.21 lb/gal) limit for Consumer Multi-Purpose Solvents. California compliant. Do not thin with solvents.**

- **The product VOC content meets the current 30% w/w limit and proposed 3% w/w limit (effective 12/31/2013) under the CARB Consumer Product Regulations for Multi-Purpose Solvents. California compliant. Do not thin with solvents.**

- **The product VOC content meets the 50 g/l (0.42 lb/gal) limit for Surface Cleaners. Canada compliant. Do not thin with solvents**

- **The product VOC content meets the 25 g/l (0.21 lb/gal) limit for Surface Cleaners. California compliant. Do not thin with solvents.**

10. **STABILITY AND REACTIVITY**

**Stable**

: Yes

**Hazardous Polymerization:**

: No

**Stability:**

Stable.

**Polymerization:**

Not expected to occur.

**Conditions to Avoid:**

Keep away from flames and any object that sparks.
LVAPC Low VOC Wax & Grease Remover

11. TOXICOLOGICAL INFORMATION

Possibility of Hazardous Reactions:
Not Available

Hazardous Decomposition Products:
Carbon Monoxide and other toxic vapors.

Incompatible Materials:
Oxidizing materials.

Product Acute Toxicity

Acute Toxicity - Dermal LD$_{50}$: > 2000 mg/kg
Notes: An estimate based on component information. Not harmful.

Acute Toxicity - Oral LD$_{50}$: > 2000 mg/kg
Notes: An estimate based on component information. Not harmful.

Acute Toxicity - Inhalation LC$_{50}$: > 10000 ppm
Notes: An estimate based on component information. Not harmful.

Product Eye Irritation/Corrosion:
Causes serious eye damage.

Product Skin Irritation/Corrosion:
Substance does not generally irritate and is only mildly irritating to the skin.

Product Chronic Toxicity:
Prolonged or excessive inhalation may cause respiratory tract irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Carcinogenicity

IARC:
Not listed.

NTP:
Not listed.

OSHA:
Not listed.

Notes: No adverse carcinogenic effects are anticipated.

Sensitization:
Not a respiratory or skin sensitizer.

Reproductive Effects:
No adverse reproductive effects are anticipated.

Target Organ Effects:
Eye hazard. Central nervous system effects.

Teratogenicity / Embryotoxicity:
Not known to harm the unborn child.

Mutagenicity:
No adverse mutagenic effects are anticipated.

Name of Synergistic Materials:
None known.

COMPONENT INFORMATION:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Test Type</th>
<th>Result</th>
<th>Species/Exposure Time</th>
<th>Acute Toxicity Estimate (ATE)</th>
<th>Acute Toxicity Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>Oral LD50</td>
<td>8400 mg/kg</td>
<td>rat</td>
<td>&gt;5000 mg/kg</td>
<td>Not Classified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5250 mg/kg</td>
<td>mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5300 mg/kg</td>
<td>rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>&gt;15,700 mg/kg</td>
<td>rabbit</td>
<td></td>
<td>&gt;5000 mg/kg</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Inhalation LC50 (vapor)</td>
<td>50,100 mg/m³</td>
<td>rat, 8h</td>
<td></td>
<td>&gt;20 mg/L/4h</td>
<td>Not Classified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>44,000 mg/m³</td>
<td>mouse, 4h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin irritation / corrosion</td>
<td>Slight irritation</td>
<td>rabbit</td>
<td></td>
<td>Not an irritant</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Eye irritation / corrosion</td>
<td>Moderate to severe</td>
<td>rabbit</td>
<td></td>
<td>Irritant – severe</td>
<td>Irritant – eye</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Non-sensitizing</td>
<td>--</td>
<td></td>
<td>Non-sensitizer</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Test Type</th>
<th>Result</th>
<th>Species/Exposure Time</th>
<th>Acute Toxicity Estimate (ATE)</th>
<th>Acute Toxicity Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>Oral LD50</td>
<td>4710-5840 mg/kg</td>
<td>Rat</td>
<td>&gt;4500 mg/kg</td>
<td>Not Classified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4475 mg/kg</td>
<td>mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5030 mg/kg</td>
<td>rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>12,870 mg/kg</td>
<td>rabbit</td>
<td></td>
<td>&gt;5000 mg/kg</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Inhalation LC50 (vapor)</td>
<td>51,000 mg/m³</td>
<td>rat, 8h</td>
<td></td>
<td>&gt;20 mg/L/4h</td>
<td>Not Classified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72,600 mg/m³</td>
<td>rat, 4h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin irritation / corrosion</td>
<td>Not irritating</td>
<td>rabbit</td>
<td></td>
<td>Not an irritant</td>
<td>Not Classified</td>
</tr>
<tr>
<td>Eye irritation / corrosion</td>
<td>Irritant</td>
<td>rabbit</td>
<td></td>
<td>Irritant</td>
<td>Irritant – eye</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Non-sensitizer</td>
<td>--</td>
<td></td>
<td>Non-sensitizer</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Environmental Data:
No data available.

Ecotoxicological Information:
No data available.

Bioaccumulation/Accumulation:
No data available.

Distribution:
No data available.

Aquatic Toxicity (Acute):
No data available.
13. DISPOSAL CONSIDERATIONS

Disposal Method:
Comply with applicable local, state or international regulations concerning solid or hazardous waste disposal and/or container disposal. Do not discharge substance/product into sewer system.

Product Disposal:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. TRANSPORT INFORMATION

DOT (Department of Transportation)

Proper Shipping Name: Paint Related Material
Primary Hazard Class/Division: 3
UN/NA Number: 1263
Packing Group: II

Other Shipping Information:
With an inner packaging < 5.0 L, this component may be renamed "Consumer Commodity" and reclassed as an ORM-D material as per DOT 173.150(b) and (c).

Air (ICAO/IATA)

Shipping Name: Paint Related Material
UN/NA Number: 1950
Primary Hazard Class/Division: 3
Packing Group: II
Subsidiary Risk: None
Label: Flammable Liquid

Vessel (IMO/IMDG)

Shipping Name: Paint Related Material
UN/NA Number: 1263
Primary Hazard Class/Division: 3
Packing Group: II
Marine Pollutant: None
Label: Flammable Liquid

Note: With an inner packaging < 5.0 L, this product may be shipped as a Limited Quantity.

Canadian Transportation of Dangerous Goods Regulations

Shipping Name: Paint Related Material
UN/NA Number: 1263
Primary Hazard Class/Division: 3
Packing Group: II
TDG Note:
With an inner packaging < 5.0 L, this component may be renamed "Consumer Commodity" or "Limited Quantity" as per TDG Section 1.17.

15. REGULATORY INFORMATION

UNITED STATES

SARA Section 311/312 Hazard Categories
- Fire Hazard: Yes
- Sudden Release of Pressure: No
- Reactive Hazard: No
- Product Acute Toxicity: Yes
- Product Chronic Toxicity: Yes

EPCRA Section 313 Toxic Chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>1 - 3</td>
<td>67-63-0</td>
</tr>
</tbody>
</table>

CERCLA Hazardous Substances and Reportable Quantities (RQ)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>5 - 10</td>
<td>5000</td>
</tr>
</tbody>
</table>

TSCA (The Toxic Substances Control Act)

- **TSCA Status:**
  All components are included or are otherwise exempt from inclusion on this inventory.

CAA 112(b) - Hazardous Air Pollutants

CAA 112(r) - List of Substances for Accidental Release Prevention:

- This product contains no chemicals subject to CAA 112(b) or CAA 112(r).

California Proposition 65:
This product contains no chemicals subject to California Proposition 65.

- **OSHA Status:** Hazardous.
  Flammable liquid. Eye irritant. Target organ effects reported.

CANADA

WHMIS Hazard Symbol and Classification

- Flammable Liquid
- Toxic

WHMIS Regulatory Status:
- WHMIS (Canada) Status: Controlled.
LVAPC Low VOC Wax & Grease Remover

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the Material Safety Data Sheet contains all the information required by the Controlled Products Regulations.

**WHMIS Classification:**
- Class B2: Flammable Liquids
- Class D2B: Toxic Material - Eye irritation

**WHMIS Ingredient Disclosure List:**
Ingredients present which are on the WHMIS Ingredient Disclosure List at, or above the minimum concentration specified on the list, are disclosed in Section 3.

**CEPA - National Pollutant Release Inventory (NPRI):**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>NPRI Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>1A, 5 (VOC)</td>
</tr>
</tbody>
</table>

**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL):** All components are included or are otherwise exempt from inclusion on this inventory.

**Comments**
VOC Content -- See section 9.

**16. OTHER INFORMATION**

**Reason for Issue:** NEW

**Approved By:** Jim Gordon   **Title:** R&D Chemist

**Prepared By:** Product Regulatory

**Information Contact:** 905-670-5411

**Revision Summary:** This MSDS replaces the 09/20/2012 MSDS. Revised: Section 9: Comments. Section 11: COMPONENT INFORMATION.

**HMIS RATING**

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
<th>PERSONAL PROTECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 2</td>
<td>3</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**NFPA CODES**

- HEALTH: 2
- FLAMMABILITY: 3
- PHYSICAL HAZARD: 0
- PERSONAL PROTECTION: B

**Manufacturer Supplemental Notes:**
None

**Data Sources:**
Not Available

**Additional MSDS Information:**
- N/AV Not Available
- N/AP Not Applicable
- ND Not yet determined
- IARC International Agency for Research on Cancer
- NTP National Toxicology Program
- CAA The Clean Air Act
- CCCR The Consumer Chemicals and Containers Regulations
- CEPA The Canadian Environmental Protection Act
General Statements:
None

Comments:
None

Manufacturer Disclaimer:
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