## SECTION 1 - PRODUCT IDENTIFICATION

**Product identifier/Trade name:** ENVIRO LINE NON VOC
**Product code/Internal Identification:** AE802
**Product use/Description:** General purpose cleaner
**Product chemical name:** Mixture
**Chemical family:** N/Ap
**MSDS preparation/review date:** September 04, 2015
**Supplier identifier:** Asalco Inc.
44, ch. Des Ursulines, Stanstead, Québec (Canada), J0B 3E0
Telephone 819-876-2211 Fax 819-876-5373 Internet www.asalco.com
**Emergency phone number:** (613) 996-6666 (CANUTEC)
**Manufacturer identifier:** Same as supplier
**Emergency phone number:** Same as supplier
**WHMIS Classification:** A – Compressed gas
B5 – Flammable aerosol
D2B – Toxic material with other toxic effects

## SECTION 2 - CHEMICAL COMPOSITION / HAZARDOUS INGREDIENTS

| Hazardous Ingredients | CAS # | % (weight) | $LD_{50}$ (route, specie) | $LC_{50}$ (specie) |
|---|---|---|---|---|
| 1,1-Difluoroethane (HFC-152A) | 75-37-6 | 15-40 | N/Av | 977 g/m$^3$ 2 hours (rat) |
| Acetone | 67-64-1 | 60-100 | 5800 mg/kg (oral, rat) | 30000 ppm 4 hours (rat) |

## SECTION 3 - HAZARDS IDENTIFICATION

**Emergency Overview**

FLAMMABLE AEROSOL. Vapours may catch fire and cause a flashback. Content under pressure. IRRITANT. Causes moderate to severe eye irritations. May cause slight skin irritations.

**POTENTIAL HEALTH EFFECTS** (for more details, refer to Section 11)

**Primary entry route(s):** Skin, eye, ingestion and inhalation.

**Effects of short-term (acute) and long-term (chronic) exposure:**

***Inhalation:***

Prolonged or excessive inhalation may cause mild central nervous system depression. May cause headache, nausea, dizziness, vomiting and incoordination.

***Skin:***

May cause slight skin irritations. Prolonged or repeated exposure may cause dermatitis (dry skin).

***Eye:***

Causes moderate to severe eye irritations.

***Ingestion:***

Prolonged or excessive ingestion may cause aspiration of liquid into the lungs and cause chemical pneumonitis or even death.

## SECTION 4 - FIRST AID MEASURES

**Inhalation:**

Remove source of contamination or have victim move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention immediately.

**Skin contact:**

Flush contaminated area with lukewarm, gently running water for at least 20 minutes or until the chemical is removed. Under running water, remove contaminated clothing. If irritation persists, obtain medical advice. Completely decontaminate clothing before reuse or discard.

**Eye contact:**

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention immediately.

**Ingestion:**

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. Obtain medical attention immediately.

## SECTION 5 - FIRE FIGHTING MEASURES

**Fire hazards/conditions of flammability:** FLAMMABLE AEROSOL. Does burn under normal handling conditions.
**Flash point (Method):** - 18°C (closed cup Tag) for Acetone.
**Lower flammable limit (% by volume):** 2.1
**Upper flammable limit (% by volume):** 13.0
**Sensitivity to mechanical impact:** Aerosols may explode or become projectiles after a mechanical impact.
**Sensitivity to static discharge:** N/Av
**Auto-ignition temperature:** N/Av
**Suitable extinguishing media:** Carbon dioxide, dry chemical powder and appropriate foam.
**Special fire-fighting procedures/equipment:**

During a fire, irritating/toxic smoke and fumes may be generated. Vapours can accumulate in confined spaces, resulting in a toxicity and flammability hazard. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from toxic products produced during the combustion. Closed containers may explode with the pressure building from the heat. Use water to cool fire exposed containers and prevent this situation.

**Hazardous combustion products:**

Carbon monoxide, carbon dioxide and other irritant gases, which may include toxic constituents.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Remove all ignition sources. Remove or isolate flammable and combustible materials. Wear adequate personal protective equipment (See Section 8). Ventilate area.

**Spill response/Cleanup:**

Stop the flow if it can be done safely. Keep materials which can burn away from spilled material. Prevent material from entering waterways, sewers or confined spaces. Put material in suitable, covered, labelled containers.

**Environmental precautions:**

Confine spill, preventing it from entering sewer lines or waterways. Dispose of as per local, state and federal regulations.

## SECTION 7 - HANDLING AND STORAGE

**Safe handling procedures:**

Before handling, it is very important that engineering controls are operating and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Do not use near welding operations, flames or hot surfaces. Ensure proper ventilation after sealed area has been treated. Inspect containers for leaks before handling. Label containers appropriately. Keep containers closed when not in use. Empty containers are always dangerous. Assume that empty containers contain residues which are hazardous. Do not use with incompatible materials.

**Storage requirements:**

Store in a cool, well-ventilated area, away from heat and ignition sources. Keep storage area clear of ignition sources. Store away from incompatible materials. Inspect all incoming containers to make sure they are properly labelled and not damaged. Store in suitable, labelled containers. Keep containers tightly closed. Empty containers are always dangerous. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering controls:**

None required under normal handling conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits.

**Respiratory Protection:**

None required under normal handling conditions. Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirator if the exposure limits are unknown.

**Protective Clothing/Equipment:**

None required under normal handling conditions. If necessary, wear chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact. Wear protective chemical safety glasses to prevent prolonged or repeated eye contact. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Comments:**

Avoid contact with skin and eyes. Avoid breathing this product. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Physical state, colour and odour:** Ketone odour and colourless aerosol/liquid.
**Odour threshold:** N/Av
**pH :** Neutral
**Melting/freezing point:** - 88 °C
**Coefficient of oil/water distribution:** N/Av
**Specific gravity or density (water = 1):** 0.790
**Evaporation rate (n-Butyl acetate = 1):** 14.4
**Boiling point:** 56.3°C
**Vapour pressure (@ 20°C):** N/Av
**Solubility in water:** Miscible
**Vapour density (Air = 1):** > 1 heavier than air
**% volatile by volume:** 100

## SECTION 10 - REACTIVITY AND STABILITY DATA

**Stability and reactivity:** Stable at room temperature, in normal handling and storage conditions.
**Polymerisation:** Hazardous polymerisation will not occur.
**Conditions to avoid:**
Avoid STRONG OXIDIZING AGENTS, metals such as Potassium, Calcium, Magnesium, Aluminum and Zinc powder. Keep away from ignition sources. Do not expose containers to mechanical impacts and temperatures exceeding 50 °C (122°F).
**Materials to avoid:**
Avoid STRONG OXIDIZING AGENTS, metals such as Potassium, Calcium, Magnesium, Aluminum and Zinc powder.
**Hazardous decomposition products:** None reported

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Exposure limits:** N/Av for the product.

| Ingredient | OSHA PEL | | ACGIH TLV | | Other exposure limits |
|---|---|---|---|---|---|
| | TWA | STEL | TWA | STEL | |
| 1,1-Difluoroethane | N/Av | N/Av | N/Av | N/Av | P/D |
| Acetone | 1000 ppm | N/Av | 500 ppm | 750 ppm | N/Av |

**For more details, refer to Section 3.**
**Carcinogenicity:**
No ingredient is listed by IARC, ACGIH, NTP or OSHA as a carcinogen.
**Teratogenicity, mutagenicity, other reproductive effects:** N/Av
**Skin sensitization:** N/Av
**Respiratory tract sensitization:** N/Av
**Synergistic materials:** N/Av

## SECTION 12 - ECOLOGICAL INFORMATION

**Environmental effects:** N/Av
**Important environmental characteristics:** N/Av
**Aquatic toxicity:** N/Av

## SECTION 13 - WASTE DISPOSAL

**Handling and storage conditions for disposal:**
Store material for disposal as indicated in Handling and Storage (Section 7).
**Methods of disposal:**
Review federal, provincial and local government requirements prior to disposal.

## SECTION 14 - TRANSPORTATION INFORMATION

**Transportation of Dangerous Goods (TDG) :**
TDG Classification: AEROSOLS; Class 2.1; UN1950
Special case: Product can also be shipped as a LIMITED QUANTITY/CONSUMER COMMODITY according to TDG Section 1.17.

## SECTION 15 - REGULATORY INFORMATION

**In Canada**

**WHMIS information:**

Product is regulated according to the Controlled Product Regulation (CPR) in Canada.

***This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.***

**Hazardous Materials Identification System (HMIS):**

HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 1 PERSONAL PROTECTION: Section 8.
HAZARD: 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

**National Fire Protection Association (NFPA):**

HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 1 PERSONAL PROTECTION: Section 8.
HAZARD: 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

**United States OSHA information:**

This product is regulated according to OSHA. This MSDS contains all the information required by OSHA.

**United States TSCA information:** The ingredients in this product are listed on the TSCA.

**New Jersey Labeling Requirements:** Ingredients to be disclosed on product labelling : Refer to Section 2.

**California Proposition 65:** This product may contain traces of chemicals that are known to the State of California to cause cancer or other reproductive harm.

## SECTION 16 - OTHER INFORMATION

**Prepared by:** NSS ENTREPRISE INC. for Asalco Inc.

**Telephone number:** Telephone 819-876-2211 Fax 819-876-5373 Internet www.asalco.com

**References:**

1. Material Safety Data Sheets from manufacturer/supplier.
2. CSST, Répertoire Toxicologique, Les produits, 2012.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2012.

**Abbreviations:**

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CAS | Chemical Abstract Service |
| CFR | Code of Federal Regulations (Transportation in U.S.A.) |
| DOT | Department of Transport (U.S.A.) |
| DSL | Domestic Substance List |
| IARC | International Agency for Research on Cancer |
| LC | Lethal concentration |
| LD | Lethal Dosage |
| NIOSH | National Institute for Occupational Safety and Health |
| NTP | National Toxicology Program (U.S.A.) |
| OSHA | Occupational Safety and Health Administration (U.S.A.) |
| PEL | Permissible Exposure Limit |
| STEL | Short-term Exposure Limit |
| TLV | Threshold Limit Value |
| TSCA | Toxic Substances Control Act |
| TWA | Time Weighted Average |
| USEPA | United States Environmental Protection Agency |
| WHMIS | Workplace Hazardous Materials Information System |

End of the MSDS