## SECTION 1 - PRODUCT IDENTIFICATION

**Product identifier/Trade name:** LCD AND PLASMA CLEANER

**Product code/Internal Identification:** AE 113

**Product use/Description:** LCD and Plasma TV cleaner. 237 mL container.

**Product chemical name:** N/Ap

**Chemical family:** N/Ap

**MSDS preparation/review date:** September 08, 2008

**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:** D2B – Toxic material with other toxic effects

## SECTION 2 - CHEMICAL COMPOSITION / HAZARDOUS INGREDIENTS

| Hazardous Ingredients | CAS # | % (weight) | $LD_{50}$ (route, specie) | $LC_{50}$ (specie) |
|---|---|---|---|---|
| This product contains less than 1 % of Ammonia & Glycol Ethers * | N/Ap | N/Ap | N/Ap | N/Ap |

* Note – The total of the different hazardous ingredients exceeds 1 %.

## SECTION 3 - HAZARDS IDENTIFICATION

**Emergency Overview**

May cause moderate to severe eye irritations. May cause slight irritations to the digestive and respiratory tract and skin.

**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:*** May cause slight irritations to the respiratory tract.

***Skin:*** May cause slight irritations to skin.

***Eye:*** May cause moderate to severe eye irritations. Possible red eyes and conjunctivitis.

***Ingestion:*** May cause slight irritations to the digestive tract. May result in diarrhea.

## 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 5 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 15 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:** This product does not burn under normal handling conditions.
**Flash point (Method):** N/Av
**Lower flammable limit (% by volume):** N/Av
**Upper flammable limit (% by volume):** N/Av
**Sensitivity to mechanical impact:** N/Av
**Sensitivity to static discharge:** N/Av
**Auto-ignition temperature:** N/Av

**Suitable extinguishing media:**
Carbon dioxide, dry chemical powder and appropriate foam for surrounding products.

**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. SMALL SPILLS: Put material in suitable, covered, labelled containers. Flush area with water. LARGE SPILLS: Contain spill with earth, sand, or absorbent material which does not react with spilled material. Place in suitable, covered, labelled containers. Contact fire and emergency services and supplier for advice. Contaminated absorbent material may pose the same hazards as the spilled product.

**Environmental precautions:**
For large spills, notify government occupational health and safety and environmental authorities. 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. Avoid generating vapours/dusts. Inspect containers for leaks before handling. Label containers appropriately. Keep containers closed when not in use. Assume that empty containers contain residues which are hazardous. Do not use with incompatible materials such as strong oxidizing agents.

**Storage requirements:**

Store in a dry, cool, well-ventilated area, away from heat and ignition sources. Keep storage area clear of ignition sources. Store away from incompatible materials such as strong oxidizers. 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 may contain hazardous residues. Keep absorbents for leaks and spills readily available. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering controls:**

Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits.

**Respiratory Protection:**

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:**

Wear chemically protective gloves (impervious), and if necessary boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective chemical safety goggles or in a splash environment in combination with a face shield. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. Separate contaminated work clothes from street clothes. Launder before reuse.

**Comments:**

Avoid contact with skin and eyes. Avoid breathing vapours/dusts. 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:** Clear colourless liquid with pleasant odour.
**Odour threshold:** N/Av
**Ph :** 6-7
**Boiling point:** 100 °C (212 °F)
**Melting/freezing point:** N/Av
**Vapour pressure:** < 0.01 mm Hg @ 20°C
**Solubility in water:** Soluble
**Coefficient of oil/water distribution:** N/Av
**Specific gravity or density (water = 1, at 4 °C):** 1.00 @ 25°C
**Vapour density:** N/Av
**Evaporation rate:** N/Av
**% volatile by volume:** 99.8

## 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, some metals, strong acids. Keep away from ignition sources.
**Materials to avoid:** Avoid STRONG OXIDIZING AGENTS, some metals, strong acids.
**Hazardous decomposition products:** None.

## SECTION 11 - TOXICOLOGICAL INFORMATION

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

| Ingredient | OSHA PEL | | ACGIH TLV | | Other exposure limits |
|---|---|---|---|---|---|
| | TWA | STEL | TWA | STEL | |
| N/Ap | N/Ap | N/Ap | N/Ap | N/Ap | N/Ap |

**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. Disposal by controlled incineration or secure landfill may be acceptable.

## SECTION 14 - TRANSPORTATION INFORMATION

**Transportation of Dangerous Goods (TDG) :**
*Shipping description:* This product is not regulated according to TDG.
Proper shipping name: N/Ap
Class: N/Ap
Identification number: N/Ap
Packing group: N/Ap
Special case: N/Ap

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

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

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

## 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, 2008.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2008.

**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