

**MATERIAL SAFETY DATA SHEET****SECTION 1 — PRODUCT IDENTIFICATION**

**Product identifier:** 0016 – Liquid Dish Detergent II      **WHMIS Classification:** D2B, E  
**Product use:** Liquid Dishwashing Detergent  
**Product Code Number:** 42830, 42831, 42832  
**MSDS Number:** 0016

**Supplier name and address:**      **Manufacturer's name and address:**  
Armstrong Manufacturing Inc.      Refer to Supplier  
2485 Haines Road  
Mississauga, Ontario L4Y 1Y7  
(905) 566-1395

**Emergency Telephone #: CANUTEC (613) 996-6666**

**SECTION 2 — CHEMICAL COMPOSITION/HAZARDOUS INGREDIENTS**

<b><u>Ingredients</u></b>	<b><u>CAS #</u></b>	<b><u>% (weight)</u></b>	<b>LD<sub>50</sub></b>	<b>LD<sub>50</sub></b>	<b>LC<sub>50</sub></b>
			<b>mg/kg oral/rat</b>	<b>mg/kg skin/rabbit</b>	<b>ppm inh/rat</b>
Sodium hydroxide	1310-73-2	10-30	n/av	n/av	n/av
Sodium nitrilotriacetate	18662-53-8	10-30	830	n/av	n/av

**SECTION 3 — HAZARDS IDENTIFICATION**

\*\*\*POTENTIAL HEALTH EFFECTS\*\*\*

**Routes of entry:** Inhalation, ingestion, skin and eye contact.

**Signs and symptoms of short-term (acute) exposure:**

*Inhalation:* Strongly irritating to the eyes, nose, throat and lungs. High concentration of vapours will cause irritation, or if inhaled as a mist.

*Skin contact:* Dangerous in case of skin contact. Causes burns. Symptoms may be delayed.

*Eye contact:* Contact can result in tissue damage. May cause blindness.

*Ingestion:* Harmful or fatal if swallowed.

**Effects of long-term (chronic) exposure:** See Section 11. **Other important hazards:** None reported.

**SECTION 4 — FIRST AID MEASURES**

**Inhalation:** Remove victim to fresh air. If symptoms persist, call a physician.

**Skin contact:** Flush skin with plenty of water, for at least 15 minutes, while removing contaminated clothing. Call physician immediately. Wash contaminated clothing before reuse.

**Eye contact:** IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open.

**Ingestion:** Immediately call physician. DO NOT induce vomiting. Give several glasses of water. Never give anything by mouth if victim is unconscious or convulsing.

**SECTION 5 — FIRE FIGHTING MEASURES**

**Fire hazards/conditions of flammability:** Not flammable.

**Flash point (Method):** Not applicable. °C (°F)

**Lower flammable limit (% by volume):** n/ap

**Upper flammable limit (% by volume):** n/ap

**Explosion data:** *Sensitivity to mechanical impact:* Not sensitive. *Sensitivity to static discharge:* Not sensitive.

**Oxidizing properties:** None.

**Auto-ignition temperature:** None.

**Suitable extinguishing media:** As appropriate for burning of surrounding products.

**Special fire-fighting procedures/equipment:** n/ap

**Hazardous combustion products:** n/ap

#### SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear adequate personal protective equipment.

**Environmental precautions:** No special precautions required.

**Spill response/Cleanup:** Recover and reuse as much of the product as possible.

**Prohibited materials:** None known.

#### SECTION 7 — HANDLING AND STORAGE

**Safe handling procedures:** Avoid contact with skin, eyes and clothing. Wear proper protective equipment, including rubber gloves.

**Storage requirements:** Store in a cool, dry area. Keep away from incompatible materials, (see Sect. 10)

**Special packaging materials:** Plastic containers.

#### SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Ventilation and engineering controls:** Mechanic ventilation should be adequate.

**Respiratory protection:** Normally not required.

**Protective gloves:** Rubber.

**Eye protection:** Safety glasses, or chemical goggles.

**Other protective equipment:** As required by workplace standards.

#### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

**Physical form, color and odor:** Clear red liquid, free from sediment. Odourless.

**Odor threshold:** n/ap

**pH:** 12-13

**Boiling point:** n/av

**Melting/freezing point:** n/av

**Vapour pressure:** n/av

**Solubility in water:** Very soluble.

**R.I.:** >30

**Coefficient of oil/water distribution:** Essentially zero.

**Specific gravity or relative density (water = 1):** 1.26

**Vapour density:** n/ap

**Volatile organic compounds (VOC's):** n/ap

**Evaporation rate:** n/av

**Percent Volatile by Weight:** n/av

#### SECTION 10 — REACTIVITY AND STABILITY DATA

**Stability and reactivity:** Normally stable.

**Conditions to avoid:** Keep containers tightly closed, when not in use.

**Materials to avoid:** Strong acids and reactive metals.

**Hazardous decomposition products:** Oxides of carbon.

#### SECTION 11 — TOXICOLOGICAL INFORMATION

**LD<sub>50</sub>:** Not established for this product. See Section 2 for values for ingredients.

**LC<sub>50</sub>:** Not established for this product. See Section 2 for values for ingredients.

**Exposure limits:** ACGIH-TLV – Not established.

**Carcinogenicity:** None of the ingredients is listed by IARC, ACGIH, NTP, and OSHA as carcinogen.

**Teratogenicity, mutagenicity, other reproductive effects:** There is no human or animal information available on teratogenicity, reproductive toxicity, or mutagenicity.

**Sensitization to material:** Not reported.

**Conditions aggravated by exposure:** Skin conditions.

**Synergistic materials:** None known.

#### SECTION 12 — ECOLOGICAL INFORMATION

**Environmental effects:** Strongly alkaline. May cause damage to aquatic life.

#### SECTION 13 — WASTE DISPOSAL

**Handling for disposal:** Reuse if possible.

**Methods of disposal:** Follow local, provincial, state and federal regulations.

#### SECTION 14 — TRANSPORTATION INFORMATION

**Shipping description:** TDG – Sodium hydroxide, solution, Class 8, UN1824, P.G. II Placard – 8- Corrosive

**Please note:** This shipping description is of a general nature only. It does not consider package sizes, modes of transport and other specific circumstances. Appropriate regulations should be referenced, and handling for transportation of dangerous goods/hazardous materials should be performed by trained personnel only.

#### SECTION 15 — REGULATORY INFORMATION

**WHMIS information:** D2B, E

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.

#### SECTION 16 — OTHER INFORMATION

**Prepared by:** Armstrong Manufacturing Inc.

**Telephone number:** (905) 566-1395

**Preparation date:** June 14, 2015

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2001.
2. International Agency for Research on Cancer Monographs, Supplement 7, 1988.
3. Canadian Centre for Occupational Health and Safety. CHEMINFO database.
4. Material Safety Data Sheets from raw materials suppliers.
5. N. Irving Sax. Dangerous Properties of Industrial Materials, Seventh Edition.

n/ap Not applicable

n/av Not available

MV/mt