MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT IDENTIFICATION

Product identifier: 0012 – Pro-Link Acid Drain Opener **WHMIS Classification:** D1A, E
Product use: Drain opener
Product Code Number: R250C (69958)
MSDS Number: 0012

Supplier name and address:
Pro-Link Canada
Box 67082, 421 Richmond Road
Ottawa, ON K2A 4E4
(613) 722-0798

Manufacturer's name and address:
Refer to Supplier

Emergency Telephone #: CANUTEC (613) 996-6666

SECTION 2 — CHEMICAL COMPOSITION/HAZARDOUS INGREDIENTS

Ingredients	CAS #	% (weight)	LD_{50} mg/kg oral/rat	LD_{50} mg/kg skin/rabbit	LC_{50} ppm inh/rat
Sulphuric acid	7664-93-9	60-100	2140	n/av	90 ppm/4H

SECTION 3 — HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Routes of entry: Inhalation, ingestion, skin and eye contact.
Emergency Overview: Danger! Extremely corrosive! Causes severe burns and eye damage.
Signs and symptoms of short-term (acute) exposure:
Inhalation: Extremely irritating and/or corrosive to the eyes, nose, throat and lungs.
Skin contact: Dangerous in case of skin contact. Causes tissue damage.
Eye contact: Contact can result in corneal damage or blindness. Immediate pain, severe burns.
Ingestion: Harmful or fatal if swallowed. May burn mouth, throat and stomach.
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, shoes and leather goods before reuse or discard.
Eye contact: IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Call a doctor immediately.
Ingestion: Immediately call physician. DO NOT induce vomiting. Rinse mouth with water; drink two or more 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. ^{o}C (^{o}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.
Auto-ignition temperature: None.

Suitable extinguishing media: As appropriate for burning of surrounding products. Use dry chemical, carbon dioxide, foam or water spray.
Special fire-fighting procedures/equipment: Corrosive material. Container may burst in heat of fire. Contact with moisture may result in heating or ignition. Capable of igniting finely divided combustibles on contact.
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. Restrict access to area until completion of clean up. Ensure trained personnel conduct clean up. Do not touch spilled material.
Prohibited materials: None known.

SECTION 7 — HANDLING AND STORAGE

Safe handling procedures: Product is corrosive. Avoid contact with skin, eyes and clothing. Wear proper protective equipment, including rubber gloves.
Storage requirements: Store in closed containers. Store in a cool, dry, well ventilated area. Keep away from incompatible materials, (see Sect. 10).

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls: Mechanic ventilation should be adequate. Local exhaust recommended.
Respiratory protection: Normally not required. If inhalation of high concentration of mist is likely, use high efficiency air respirator.
Protective gloves: Butyl, nitrile rubber or natural rubber. Confirm with reputable suppler first.
Eye protection: Chemical goggles and face shield.
Other protective equipment: As required by workplace standards.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical form, color and odor: Clear amber liquid, pungent odour.
Odor threshold: n/av
pH: <1
Boiling point: 270^{o}C
Melting/freezing point: n/av
Vapour pressure: 0.0018 mm Hg @20^{o}C
Solubility in water: Very soluble.
Coefficient of oil/water distribution: Essentially zero.
Specific gravity or relative density (water = 1): 1.835
Vapour density (Air=1): 3.4
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: Unintentional contact with water and moisture. Keep containers tightly closed, when not in use.
Materials to avoid: Organic materials, metals and combustible materials. When diluting DO NOT add water to the acid. Add acid to water.
Hazardous decomposition products: Decomposes on heating, emitting toxic fumes. Oxides of sulphur.

SECTION 11 — TOXICOLOGICAL INFORMATION

LD_{50}: Not established for this product. See Section 2 for values for ingredients.

LC_{50}: Not established for this product. See Section 2 for values for ingredients.
Exposure limits: ACGIH-TLV 1 mg/m^3 (TWA)
Carcinogenicity: Sulphuric acid 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: Product is corrosive. Low pH (acidity) of material is harmful 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 – Sulphuric acid, Class 8, UN1830 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: D1A, 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 for: Pro-Link Canada
Telephone number: (613) 722-0798
Preparation date: October 25, 2013

References:

1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2003.
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