SAFETY DATA SHEET

Coatless™ Sn Strip

SECTION 1: IDENTIFICATION

Product identifier used on a label:	**Coatless™ Sn Strip**
Product code:	5438D
Recommended use of the chemical and restrictions on use:	Tin and tin alloy stripper.
Chemical family:	Mixture.
Name, address and phone # of supplier:	Aqua Bond Inc. 440 Passmore ave. Scarborough, ON, M1V 5J8 (416) 754-7211
24 Hr. Emergency phone #	**CANUTEC (613) 996-6666**

SECTION 2: HAZARDS IDENTIFICATION

Classification of the chemical: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:
OXIDIZING LIQUID- Category 3
CORROSIVE TO METALS- Category 1
REPRODUCTIVE TOXICITY- Category 2
ACUTE TOXICITY, inhalation- Category 2
SKIN CORROSION-Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
STOT-SE- Category 3 (systemic toxicity, respiratory system)
STOT-RE- Category 2 (liver, blood, immune system)

Label elements:



Signal word: Danger

Hazard statements:
H272 May intensify fire; oxidizer.
H290 May be corrosive to metals.
H330 Fatal if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H314 Causes severe skin burns and eye damage.
H371 May cause respiratory irritation.
H373 May cause damage to lover, blood or immune system.

Precautionary statements:
P210 Keep away from heat.
P220 Keep away from clothing, organic material, combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P280 Wear protective gloves/eye protection/face protection.
P234 Keep only in original container.

P260 Do not breathe fumes/mists/spray.
P271 Use only outdoors or in a well-ventilated area.
P284 In case of inadequate ventilation wear respiratory protection.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash hands thoroughly after handling.
P370+P378 In case of fire: Use water spray or mist to extinguish.
P390 Absorb spillage to prevent material damage.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTER/doctor/physician.
P308+P313 IF exposed or concerned: Get medical advice.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P406 Store in corrosive resistant container or a container with a resistant inner liner.
P403+P233 Store in a well-ventilated place. Keep container tghtly closed.
P405 Store locked up.
P501 Dispose of contents/container according to all federal and provincial regulations.

Other hazards: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 28%

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/ mixture: Mixture

Ingredient name	**CAS Number**	**Concentration (%)**
Nitric acid	7697-37-2	20-30
Organic amine	333-18-6	1-5
MSA	75-75-2	5-10
Ferric ion	10025-77-1	8-15

Concentrations are shown as ranges due to batch variation.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

Ingestion: Get medical attention. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous due to aspiration. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

	Maintain an open airway. Get medical attention if breathing is difficult.
Skin contact	Remove contaminated clothing and shoes. Wash skin thoroughly with water.
Eye contact	Get medical attention immediately. Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open.

Most important symptoms and effects, both acute and delayed:
Causes burns by all exposure routes. Ingestion causes severe swelling and damage to delicate tissue. Product is corrosive and therefore possible stomach or esophagus perforation should be investigated upon ingestion.
Indication of any immediate medical attention and special treatment needed:
No specific treatment. Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable	Use appropriate extinguishing media for surrounding fires.
Unsuitable	None known.
Special hazards arising from the substance:	If heated the pressure in a container will rise which may result in container bursting.
Hazardous thermal decomposition products:	Nitrogen oxides, metal oxides, halogenated compounds, carbon oxides.
Special protective actions for fire-fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material.
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up:	Small spill: Stop leak if without risk. Move containers from spill area. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows.

	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Special spill response procedures:	In case of transportation accident, contact CHEMTREC at 1-800-424-9300.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:	Put on appropriate personal protective equipment. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
Conditions for safe storage:	Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Incompatible materials:	Combustible materials, metals, strong bases, direct sunlight.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Exposure limits

Ingredient	**Exposure limits**
Organic amine	Not available.
Nitric acid	**ACGIH TLV** TWA: 2 ppm STEL: 4 ppm **OSHA PEL** (vacated) TWA: 2 ppm (vacated) TWA: 5 mg/m3 (vacated) STEL: 4 ppm (vacated) STEL: 10 mg/m3 TWA: 2 ppm TWA: 5 mg/m3 **NIOSH IDLH** IDLH: 25 ppm TWA: 2 ppm TWA: 5 mg/m3 STEL: 4 ppm

	STEL: 10 mg/m3
MSA	Not available.
Ferric ion	**NIOSH IDLH** TWA: 1mg/m3 **ACGIH TLV** TWA: 1mg/m3 **OSHA PEL** (vacated) TWA: 1mg/m3
Engineering controls:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Individual protection measures:	Eyes/face: Chemical splash goggles. Skin: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid. Amber to brown.
Odor:	Sharp acidic.
Odor threshold:	Not available.
pH:	< 1
Melting point:	Not available.
Freezing point:	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	Not available.
Evaporation rate:	Not available.
Flammability:	Not available.
Upper and lower flammability limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	1.2032
Solubility:	Soluble in water.
Partition coefficient n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	The product is stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Direct sunlight.
Incompatible materials:	Combustible materials, metals, strong bases.
Hazardous decomposition products:	Under normal conditions of storage, no hazardous decomposition products are anticipated.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure:	SKIN AND EYES: yes INHALATION: yes INGESTION: yes
Potential health effects (acute):	EYE: Corrosive to any kind of tissue. Adverse symptoms may include pain, watering, redness, corneal damage and blindness. INHALATION: Respiratory tract irritant. Symptoms include coughing, wheezing, sore throat. SKIN: Corrosive to any kind of tissue. Symptoms are redness, blistering, itching, scarring. INGESTION: Systemic toxicity may occur if ingested in significant amounts.
Delayed and immediate effects, chronic effects from short and long term exposure:	Toxic by ingestions. Affects liver, blood and immune system. Corrosive in contact with any tissue.
Potential chronic health effects:	There are no data available on the mixture itself.
Carcinogenicity:	None of the components are listed as carcinogens.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	One of the components is suspected of damaging fertility or the unborn child.
Sensitization:	There are no data available on the mixture itself.
Toxicological effects:	
Acute toxicity:	

Product	Result	Species	Dose	Exposure
Nitric acid	LD50 oral	-	-	-
	LD50 dermal	-	-	-
	LD50 inhalation	Rat	>2.65 mg/L	4 hr

Organic amine	LD50 oral	Mouse	1620 mg/kg	-
	LD50 dermal	-	-	-
	LC50 inhalation	-	-	-
MSA	LD50 oral	Rat	649 mg/kg	-
	LD50 dermal	Rabbit	>1000-2000mg/kg	-
	LC50 inhalation	-	-	-
Ferric ion	LD50 oral	Rat	900 mg/kg	-
	LD50 dermal	-	-	-
	LC50 inhalation	-	-	-

Acute toxicity estimate:

Route	**ATE value**
Oral	2290 mg/kg

Irritation/corrosion: Based on component information may cause severe burns.

Specific target organ toxicity single exposure:

Name	**Category**	**Route**	**Target organs**
MSA	3	Inhalation	Respiratory tract irritation.
Nitric acid	3	Inhalation	Respiratory tract irritation.
Ferric ion	2	Not available	Systemic toxicity.
	3	Inhalation	Respiratory tract irritation.

Specific target organ toxicity repeated exposure:

Target organs: Liver, blood, immune system through oral exposure.

Aspiration hazard: Not available.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity Not available.

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil: Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

SECTION 14: TRANSPORT INFORMATION

	TDG
UN Number:	UN3264
UN proper shipping name:	Corrosive liquid, acidic, inorganic, N.O.S. (Inorganic acid)
Transport hazard class:	Class 8
Packing group:	II
Environmental hazard:	No.
Special precautions for user:	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

Canada inventory (DSL): All components are listed or exempted.

SECTION 16: OTHER INFORMATION

Revision date: March 23, 2017

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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