Head Office: 9 Kidson Place, Stoke, Nelson, New Zealand 7011
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MATERIAL SAFETY DATA SHEET

Product name: Promax General Purpose Liquid Soldering Flux 5L

Date of Issue: 13/07/2017
Ref. No: TM00116

Section 1 Product & Company Identification

Product Name:	Promax General Purpose Liquid Soldering Flux 5L
Other Names:	
Use:	General purpose soldering Fluid

Supplier / Manufacturer

Name:	Proline Welding Supplies
Address:	9 Kidson Place, Stoke, Nelson 7011
Telephone No:	
Emergency No:	0800 699 353

Section 2 Hazard(s) Identification

Hazard Classification according to Worksafe New Zealand

Risk Phrase(s):	R22	Harmful if swallowed.
	R34	Causes burns.
	R36/38	Irritating to skin & eyes.
	R41	Risk of serious damage to eyes.
Safety Phrase(s):	S1/2	Keep locked up and out of reach of children.
	S7	Keep container tightly closed.
	S13	Keep away from food, drink and animal feeding stuffs.
	S24/25	Avoid contact with skin & eyes.
	S26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
	S28	In the event of contact with skin wash immediately with plenty of water.
	S45	In case of an accident or you feeling unwell, contact a doctor or the Poison Line immediately (show label where possible).
	S62	If swallowed **do not** induce vomiting: seek medical advice immediately and show label off the container.

Section 3 Composition & Information on Ingredients

Chemical Entity	Proportion	CAS Number
Zinc Chloride	30-60 %	7646-85-7
Ammonium Chloride	<10 %	12125-02-9
Hydrochloric Acid	<2 %	7647-01-0
Water	Balance	7732-18-5

Section 4 First Aid Measures

Description of necessary measures according to route of exposure

Ingestion: Do NOT induce vomiting. If poisoning occurs, contact doctor or Poisons Information Centre. If conscious, give water (or milk) to rinse out mouth and drink. Provide liquid slowly but as much as casualty will drink.

Eye: If contact with eyes occurs, hold eyes open, flood with water for at least 15 minutes and see a doctor without delay.

Skin: Immediately wash away with plenty of soap and water. Remove ALL contaminated clothing. If swelling, redness, blistering or irritation occurs seek medical advice.

Inhaled: First aid is unlikely to be required from normal use. However, if combustion products are inhaled remove to fresh air. Keep warm and rested. If breathing is shallow or has stopped, ensure clear airway and apply resuscitation. Seek medical advice.

Medical attention and Special Treatment

Treat symptomatically. For ingestion consider gastric lavage

Medical Conditions aggravated caused by exposure

No chronic effects have been reported in humans from normal industrial use. neither zinc nor ammonium chloride has been listed by the International Agency for Research on cancer as either human or animal carcinogens.

Section 5 Fire Fighting Measures

Extinguishing Media: Water spray or fog, Foam, Dry chemical powder or Carbon Dioxide.

Hazards from combustion Products: Not combustible. However, heating to decomposition produces toxic fumes of Hydrogen Chloride, Ammonia, Nitrogen Oxides and Zinc Oxides.

Special Protective Equipment: Fire fighters should wear self-contained breathing apparatus if risk of exposure to products of decomposition.

Additional information: Fire fighting procedure- Alert Fire Brigade, tell them location and nature of hazard. Do not approach containers suspected to be hot. Cool fire exposed containers with spray from a protected location. If safe to do so, remove containers from path of fire.

HAZCHEM CODE: **2X**

Section 6 Spillage, accidental release measures

Emergency Procedure:	Personnel involved in the clean-up should wear full protective clothing.

Methods and Materials for containment and Clean-ups Procedures

Small Spills / Leaks:	Wash with plenty of water.
Large Spills:	Environment hazard; contain spillage. Advise the Environment Protection Authority. Wearing protective clothing, absorb spill with inert material such as sand or vermiculite. Collect residues and seal in labelled drum for disposal. Spread area with lime and leave for at least 1 hour before washing. Wash area down with large quantities of water and prevent run off into drains or waterways.

For Personal Protective Equipment (PPE) – refer to section 8 of this MSDS (if required)

Section 7 Handling and storage

Store and handle in accordance with the requirements of the Dangerous Goods (Storage & handling) Regulations for Class 8 Substances (Part 10). This material is a Schedule 6 Poison and must be packaged and labelled in accordance with the Hazardous Substances (Identification) Regulations 2001 in New Zealand.

Precautions for Safe Handling:	Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling.
Conditions for Safe Storage:	Store in a cool, dry, well ventilated place.

Section 8 Exposure controls & personal protection

National Exposure Standards – as regulated by: WORKSAFE NEW ZEALAND

Chemical Names	**ES – TWA**	**ES – STEL**	**ES – Peak**
Zinc Chloride (fume):	1 mg/m^3	2 mg/m^3	
Ammonium Chloride (fume):	10 mg/m^3	20 mg/m^3	
Hydrogen chloride:	5 ppm		Peak Limitation

Biological Limit Values:	No Data available
Engineering Controls:	If irritating fumes of hydrogen chloride are given off, use with local exhaust ventilation.

Personal Protective Equipment (PPE)

Eye / Face Protection	Wear chemical goggles or full face mask. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.
Skin Protection:	Wear safety footwear, overalls and PVC Gloves and aprons.
Respiratory Protection:	If inhalation risk remains (this is unlikely), wear a particulate/ gas respirator complying with AS1716. Use in accordance with AS1715.

Section 9 Physical and Chemical properties

Appearance:	Liquid
Colour:	Colourless
Odour:	Nil
Vapour Pressure:	N/A
Vapour Density:	N/A
Boiling point/ range:	100^{o}c - 105^{o}c
Melting point:	N/A
Solubility in water:	N/A
Specific gravity:	1.32
Flash point:	N/A
pH:	3.9

For Flammable Limits (as a percentage volume in air)

Lower Explosion Limit:	N/A
Upper Explosion Limit:	N/A
Ignition Temperature:	N/A
Specific Heat Value:	N/A
Particle Size:	N/A
Volatile Organic Compound (VOC) content:	N/A
Evaporation Rate:	N/A
Viscosity:	N/A
Percent Volatile:	N/A
Octanol/Water partition coefficient:	N/A
Saturated Vapour Concentration:	N/A
Additional Characteristics:	N/A
Flame Propagation/ Burning Rate of Solid Materials:	N/A
Properties of material that may contribute or Initiate to fire intensity:	N/A
Potential for Dust Explosion:	N/A
Reactions that Release Flammable Gases:	N/A
Fast or Intensely Burning Characteristics:	N/A
Non-Flammables that could contribute unusual Hazards to a fire:	N/A
Release of invisible Flammable Vapour and Gases:	Nil
Decomposition Temperature:	N/A

Additional Information

Molecular Weight:	N/A
Solubility:	N/A

Section 10 Stability and reactivity

Chemical Stability:	Product is stable under normal conditions of use and storage.
Conditions to Avoid:	Avoid excessive heat and direct sunlight.
Incompatible Materials:	Incompatible with oxidising agents, acids and alkali.
Hazardous Decomposition Products:	No data available.
Hazardous Reactions:	No data available.

Section 11 Toxicological Information

Toxicity Data:	For Zinc chloride acute oral LD50 (rat): 350mg/kg.
Ingestion:	The liquid is corrosive and harmful to the gastro-intestinal tract. An unlikely route of entry from industrial use.
Eye:	The liquid is irritating and corrosive to the eye and is capable of causing severe damage with loss of sight. On eye contact this product will cause tearing, stinging, blurred vision and redness.
Skin:	Corrosive and capable of causing burns to the skin with prolonged contact.
Inhaled:	Not an inhalation risk at normal temperatures. At soldering temperatures minor respiratory tract irritation may occur due to hydrochloric acid fumes.

Section 12 Ecological Information

Eco-toxicity:	Toxic to marine organisms and expected to be fatal unless concentration is low.
Persistence / degradability:	No data available.
Mobility:	No data available.
Environmental Fate:	No data available.
Bio-accumulative Potential:	No data available

Section 13 Disposal Considerations

Disposal Methods:	Dispose of in accordance with the local and state regulations at an approved waste facility.
Special Precautions for Landfill Or Incineration:	No data available.

The disposal Considerations mentioned above applies to the material / product described in this MSDS as manufactured. Further processing, use, or contamination of the product may make the information in appropriate, inaccurate or incomplete.

Section 14 Transportation Information

UN Number:	1760
UN Shipping Name:	CORROSIVE LIQUID, N.O.S.
Dangerous Goods Class:	8
Packing Group	lll
Special Precautions / Requirements	Handle with care
HAZCHEM Code:	2X

Section 15 Regulatory Information

Poison Schedule Number:	1760
EPG:	8A1
AICS Name:	N/A
NZ Toxic Substance:	N/A

Section 16 Other Information

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Next revision 17/06/2021