

# **TB-95 ETCHING FLUID**

FOR STAINLESS STEEL



by **C** ensitech<sup>®</sup>

# **SAFETY DATA SHEET**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

#### Product name TB-95 ETCHING FLUID FOR STAINLESS STEEL (AU)

Synonym(s) ETCHING FLUID FOR STAINLESS STEEL

#### 1.2 Uses and uses advised against

Use(s)

## ETCHANT

Etching Stainless Steel with the TIG Brush.

#### 1.3 Details of the supplier of the product

Supplier name	ENSITECH PTY LTD (AU)
Address	1/144 Old Bathurst Rd, EMU PLAINS, NSW, 2750, AUSTRALIA
Telephone	+61 2 4735 7700
Fax	+61 2 4735 7744
Website	www.tigbrush.com

#### 1.4 Emergency telephone number(s)

Emergency +1 352-323-3500

## 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO AUSTRALIAN WHS REGULATIONS

**GHS classification(s)** Skin Corrosion/Irritation: Category 2 Serious Eye Damage / Eye Irritation: Category 2A

2.2	Label	elements

Signal word

Pictogram(s)





Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.

#### Prevention statement(s)

P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response statement(s	)

# P302 + P352IF ON SKIN: Wash with plenty of soap and water.P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to<br/>do. Continue rinsing.P321Specific treatment is advised - see first aid instructions.P332 + P337 + P313If skin or eye irritation occurs: Get medical advice/ attention.P362Take off contaminated clothing and wash before re-use.

#### Storage statement(s)

None allocated.



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#### Disposal statement(s)

None allocated.

#### 2.3 Other hazards

No information provided.

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
HYDROCHLORIC ACID	7647-01-0	231-595-7	1 to 2%
WATER	7732-18-5	231-791-2	>60%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	<10%

## 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

Еуе	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.
First aid facilities	No information provided.

#### 4.2 Most important symptoms and effects, both acute and delayed

Irritating to the eyes and skin.

#### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

#### 5.2 Special hazards arising from the substance or mixture

Non flammable. May evolve toxic gases if strongly heated.

#### 5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

#### 5.4 Hazchem code

None allocated.

## 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

#### 6.2 Environmental precautions

Prevent product from entering drains and waterways.



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#### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

#### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

## 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.

#### 7.3 Specific end use(s)

No information provided.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

#### **Exposure standards**

Ingredient	Reference	TWA		STEL	
	ppm		mg/m³	ppm	mg/m³
Hydrogen chloride (Hydrochloric acid)	SWA (AUS)	5	7.5 (Peak)		

#### **Biological limits**

No biological limit values have been entered for this product.

#### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

#### PPE

Eye / Face	Wear splash-proof goggles.
Hands	Wear PVC or rubber gloves.
Body	When using large quantities or where heavy contamination is likely, wear coveralls. In a laboratory situation, wear a laboratory coat.
Respiratory	Not required under normal conditions of use.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	TEAL COLOURED LIQUID
Odour	PEPPERMINT ODOUR
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	100°C (Approximately)
Melting point	0°C (Approximately)
Evaporation rate	NOT AVAILABLE
pH	1 (Approximately)
Vapour density	NOT AVAILABLE
Specific gravity	1.05



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#### 9.1 Information on basic physical and chemical properties

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Solubility (water)	SOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

## **10. STABILITY AND REACTIVITY**

#### 10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

#### 10.2 Chemical stability

Stable under recommended conditions of storage.

#### 10.3 Possibility of hazardous reactions

Polymerization will not occur.

#### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

#### 10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites) and alkalis (e.g. sodium hydroxide).

#### 10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

## **11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

Acute toxicity

#### Information available for the product:

Based on available data, the classification criteria are not met.

#### Information available for the ingredient(s):

Ingredient		Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)	
HYDROCHLORIC ACID		2210 mg/kg (rat)		1108 ppm/1hr (human -	
Skin	Irritating to the skin. Contac prolonged contact.	t may result in irritation, la	crimation, pain and redness	s. May result in burns with	
Eye	Irritating to the eyes. Contac prolonged contact.	ct may result in irritation, la	crimation, pain and rednes	s. May result in burns with	
Sensitization	Not classified as causing skin or respiratory sensitisation.				
Mutagenicity	Insufficient data available to classify as a mutagen.				
Carcinogenicity	Insufficient data available to classify as a carcinogen.				
Reproductive	Insufficient data available to classify as a reproductive toxin.				
STOT – single exposure	Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in nasal inflammation, delayed breathing difficulties and pulmonary oedema.				
STOT – repeated exposure	Not classified as causing or with single exposure.	gan damage from repeated	d exposure. Adverse effect	s are generally associated	
Aspiration	Not an aspiration hazard.				



## **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

Hydrochloric acid is hazardous to aquatic life at high concentrations.

#### 12.2 Persistence and degradability

The product is not expected to persist in the environment.

#### 12.3 Bioaccumulative potential

Not expected to bioaccumulate.

#### 12.4 Mobility in soil

This substance is water soluble and is expected to remain primarily in water.

#### 12.5 Other adverse effects

No information provided.

## 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

**Waste disposal** Wearing the protective equipment detailed above, neutralise to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste disposal should only be undertaken in a well ventilated area.

Legislation Dispose of in accordance with relevant local legislation.

#### 14. TRANSPORT INFORMATION

#### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	None Allocated	None Allocated	None Allocated
14.2 Proper Shipping Name	None Allocated	None Allocated	None Allocated
14.3 Transport hazard class	None Allocated	None Allocated	None Allocated
14.4 Packing Group	None Allocated	None Allocated	None Allocated

14.5 Environmental hazards No information provided

#### 14.6 Special precautions for user

Hazchem code None Allocated

## **15. REGULATORY INFORMATION**

15.1 Safety, health an	nd environmer	ntal regulations/legislation specific for the substance or mixture	
Poison schedule	Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).		
Classifications	Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals. The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].		
Hazard codes	Xi	Irritant	
Risk phrases	R36/38	Irritating to eyes and skin.	
Safety phrases	S26 S45	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).	
Inventory listing(s)	AUSTRALIA: AICS (Australian Inventory of Chemical Substances) All components are listed on AICS, or are exempt.		



## **16. OTHER INFORMATION**

Additional information	PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product
	concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.
	HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and environmentation.
	apply control methods where appropriate.
Abbreviations	ACGIH American Conference of Governmental Industrial Hygienists CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds
	CNS Central Nervous System
	EC No. EC No - European Community Number
	EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous
	Goods)
	GHS Globally Harmonized System
	GTEPG Group Text Emergency Procedure Guide
	IARC International Agency for Research on Cancer
	LC50 Lethal Concentration, 50% / Median Lethal Concentration
	LD50 Lethal Dose, 50% / Median Lethal Dose
	mg/m <sup>3</sup> Milligrams per Cubic Metre
	OEL Occupational Exposure Limit
	pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
	ppm Parts Per Million
	STEL Short-Term Exposure Limit
	STOT-RE Specific target organ toxicity (repeated exposure)
	STOT-SE Specific target organ toxicity (single exposure)
	SUSMP Standard for the Uniform Scheduling of Medicines and Poisons
	SWA Safe Work Australia TLV Threshold Limit Value
	TWA Time Weighted Average
Report status	This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').
	It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.
	While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does
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