



Nonfood Compounds  
Program Listed P1  
151123

# TB-95 ETCHING FLUID FOR STAINLESS STEEL

# TIG Brush®

by  ensitech®

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

#### 1.1 Product identifier

**Product name** TB-95 ETCHING FLUID FOR STAINLESS STEEL (UK)  
**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 (C/O VICKERS LABS LTD) (UK)  
**Address** Grangefield Industrial Estate, Richardshaw Road, Pudsey, West Yorkshire, UNITED KINGDOM  
**Telephone** +44 (0) 113 236 2811  
**Website** [www.tigbrush.com](http://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

CLASSIFICATION ACCORDING TO REGULATION (EC) NO. 1272/2008 [CLP/GHS]

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

#### 2.2 Label elements

LABELLING ACCORDING TO REGULATION (EC) NO. 1272/2008 [CLP/GHS]

**Signal word** WARNING

**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 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment is advised - see first aid instructions.  
P332 + P337 + P313 If skin or eye irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before re-use.

#### Storage statement(s)

None allocated.

**PRODUCT NAME TB-95 ETCHING FLUID FOR STAINLESS STEEL (UK)**

**Disposal statement(s)**

None allocated.

**2.3 Other hazards**

No information provided.

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**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

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**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%

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**4. FIRST AID MEASURES**

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**4.1 Description of first aid measures**

- Eye** 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 or a doctor (at once). If swallowed, do not induce vomiting.
- First aid facilities** Eye wash facilities and safety shower should be available.

**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.

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**5. FIRE FIGHTING MEASURES**

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**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.

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**6. ACCIDENTAL RELEASE MEASURES**

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**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.

**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/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Hydrogen chloride (gas and aerosol mists)	WEL (UK)	1	2	5	8
Hydrogenchlorid	OEL (Germany)	2	3	--	--
Hydrogenklorid	OEL (Norway)	5	7	--	--

#### 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

<b>Appearance</b>	TEAL COLOURED LIQUID
<b>Odour</b>	PEPPERMINT ODOUR
<b>Flammability</b>	NON FLAMMABLE
<b>Flash point</b>	NOT RELEVANT
<b>Boiling point</b>	100°C (Approximately)
<b>Melting point</b>	0°C (Approximately)
<b>Evaporation rate</b>	NOT AVAILABLE
<b>pH</b>	1 (Approximately)
<b>Vapour density</b>	NOT AVAILABLE
<b>Specific gravity</b>	1.05
<b>Solubility (water)</b>	SOLUBLE
<b>Vapour pressure</b>	NOT AVAILABLE
<b>Upper explosion limit</b>	NOT RELEVANT
<b>Lower explosion limit</b>	NOT RELEVANT
<b>Partition coefficient</b>	NOT AVAILABLE

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

Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

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**10. STABILITY AND REACTIVITY**

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**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.

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**11. TOXICOLOGICAL INFORMATION**

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**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 -

<b>Skin</b>	Irritating to the skin. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.
<b>Eye</b>	Irritating to the eyes. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.
<b>Sensitization</b>	Not classified as causing skin or respiratory sensitisation.
<b>Mutagenicity</b>	Insufficient data available to classify as a mutagen.
<b>Carcinogenicity</b>	Insufficient data available to classify as a carcinogen.
<b>Reproductive</b>	Insufficient data available to classify as a reproductive toxin.
<b>STOT – single exposure</b>	Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties.
<b>STOT – repeated exposure</b>	Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.
<b>Aspiration</b>	Not an aspiration hazard.

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**12. ECOLOGICAL INFORMATION**

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**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 Results of PBT and vPvB assessment**

Not classified as PBT or vPvB.

**12.6 Other adverse effects**

No information provided.

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**13. DISPOSAL CONSIDERATIONS**

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**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.

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**14. TRANSPORT INFORMATION**

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**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF ADR, IMDG OR IATA**

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

**14.5 Environmental hazards** No information provided**14.6 Special precautions for user**

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**15. REGULATORY INFORMATION**

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**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

<b>Classifications</b>	Xi	Irritant
<b>Risk phrases</b>	R36/38	Irritating to eyes and skin.
<b>Safety phrases</b>	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).
<b>Inventory listing(s)</b>	<b>EUROPE:EINECS (European Inventory of Existing Chemical Substances)</b> All components are listed on EINECS, or are exempt.	

**15.2 Chemical safety assessment**

No information provided.

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**16. OTHER INFORMATION**

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**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.

**PRODUCT NAME TB-95 ETCHING FLUID FOR STAINLESS STEEL (UK)****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 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
DNEL	Derived No Effect Level
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
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
PBT	Persistent, bioaccumulative, toxic
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
PNEC	Predicted No Effect Concentration
ppm	Parts Per Million
REACH	Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average
vPvB	Very Persistent and Very Bioaccumulative

**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 not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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Prepared in accordance with: Annex II of the REACH Regulation (EC) 1907/2006; (CLP) Regulation (EC) 1272/2008; and Regulation (EC) 453/2010 (Amendments to (EC) 1272/2008).

**[ End of SDS ]**