



Nonfood Compounds  
Program Listed A3  
150090

# TB-21ND WELD CLEANING 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-21ND WELD CLEANING FLUID FOR STAINLESS STEEL (UK)  
**Synonyms** TB21ND WELD CLEANING FLUID • WELD CLEANING FLUID

#### 1.2 Uses and uses advised against

**Uses** TIG BRUSH WELD CLEANING SOLUTION FOR STAINLESS STEEL

#### 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** <http://www.tigbrush.com>

#### 1.4 Emergency telephone numbers

**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]

##### Physical Hazards

Not classified as a Physical Hazard

##### Health Hazards

Skin Corrosion/Irritation: Category 2  
Serious Eye Damage / Eye Irritation: Category 2A

##### Environmental Hazards

Not classified as an Environmental Hazard

#### 2.2 GHS Label elements

**Signal word** WARNING

##### Pictograms



##### Hazard statements

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

##### Prevention statements

P264 Wash thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

## PRODUCT NAME TB-21ND WELD CLEANING FLUID FOR STAINLESS STEEL (UK)

### Response statements

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.  
P362 Take off contaminated clothing and wash before re-use.

### Storage statements

None allocated.

### Disposal statements

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   | Classification CLP                        |
|---------------------------|---------------|-----------|-----------|---|
| PHOSPHORIC ACID           | 7664-38-2     | 231-633-2 | 23 to 24% | Skin Corr. 1B, H314<br>Acute Tox. 4, H332 |
| NON HAZARDOUS INGREDIENTS | Not Available | Not       | >60%      |   |

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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.

**Ingestion** For advice, contact the UK National Poisons Information Service on 844 892 0111 or a doctor (at once). If swallowed, do not induce vomiting.

**First aid facilities** Eye wash facilities 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 (phosphorus oxides) when heated to decomposition. Contact with most metals may evolve flammable hydrogen gas.

### 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 sodium bicarbonate or 50-50 mixture of sodium carbonate and calcium hydroxide. Collect for complete neutralisation and appropriate disposal.

**6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

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**7. HANDLING AND STORAGE**

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**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. This solution should not be used in a spraying application.

**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. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems.

**7.3 Specific end uses**

No information provided.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**8.1 Control parameters**

**Exposure standards**

| Ingredient           | Reference | TWA |                   | STEL |                   |
|----------------------|-----------|-----|-------------------|------|-------------------|
|                      |           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Orthophosphoric acid | WEL [UK]  | --  | 1                 | --   | 2                 |

**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. Maintain vapour levels below the recommended exposure standard.

**PPE**

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear PVC or rubber gloves.
- Body** Wear coveralls.
- Respiratory** Where an inhalation risk exists, wear a Type B (acid gas and vapours) respirator.



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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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

- Appearance** ORANGE COLOURED LIQUID
- Odour** SWEET ODOUR
- Flammability** NON FLAMMABLE
- Flash point** NOT RELEVANT
- Boiling point** 100°C (Approximately)
- Melting point** < 0°C

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

|                           |                   |
|---------------------------|-------------------|
| Evaporation rate          | AS FOR WATER      |
| pH                        | 2.01              |
| Vapour density            | NOT AVAILABLE     |
| Relative density          | 1 (Approximately) |
| Solubility (water)        | SOLUBLE           |
| Vapour pressure           | 18 mm Hg @ 20°C   |
| 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     |

**9.2 Other information**

|             |                |
|-------------|----------------|
| % Volatiles | > 60 % (Water) |
|-------------|----------------|

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

May be corrosive to metals.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to 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), alkalis (e.g. sodium hydroxide) and metals.

**10.6 Hazardous decomposition products**

May evolve toxic gases (phosphorus oxides) when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute toxicity** Acute oral exposure may result in irritation of the mouth, throat, oesophagus and gastrointestinal tract.

**Information available for the ingredients:**

| Ingredient      | Oral LD50        | Dermal LD50         | Inhalation LC50              |
|-----------------|------------------|---------------------|------------------------------|
| PHOSPHORIC ACID | 1530 mg/kg (rat) | 2740 mg/kg (rabbit) | 3846 mg/m <sup>3</sup> (rat) |

|                                 |   |
|---------------------------------|---|
| <b>Skin</b>                     | Irritating to the skin. Contact may result in irritation, redness, pain, rash, dermatitis and possible skin burns.                      |
| <b>Eye</b>                      | Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible burns.                |
| <b>Sensitisation</b>            | Insufficient data for classification as a skin or respiratory sensitiser.   |
| <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 classified as causing aspiration.   |

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Phosphoric acid may be hazardous to aquatic life at high concentrations.

### 12.2 Persistence and degradability

While acidity may be reduced by natural water minerals, the phosphate may persist indefinitely.

### 12.3 Bioaccumulative potential

Not expected to bioaccumulate.

### 12.4 Mobility in soil

When spilled onto soil, it will permeate downward, and may dissolve some of the soil matter, especially carbonate-based materials. Some acid will be neutralised, however significant amounts will remain for transport to groundwater.

### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### 12.6 Other adverse effects

Avoid contamination of drains and waterways.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Waste disposal** For small amounts (as determined by risk assessment or similar): 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. For larger amounts: Dispose in accordance with local regulations.

**Legislation** Dispose of in accordance with relevant local legislation.

## 14. TRANSPORT INFORMATION

### 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) |
|-----------------------------|----------------------------|----------------------------|-----------------------------|
| 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

## 15. REGULATORY INFORMATION

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

**Classifications** None allocated.

**Risk phrases** None allocated.

**Safety phrases** None allocated.

**Inventory listings** **EUROPE:EINECS (European Inventory of Existing Chemical Substances)**  
All components are listed on EINECS, or are exempt.

### 15.2 Chemical safety assessment

No information provided.

## 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 form of product, 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: form of product; 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 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 ]