1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
- **Product name**: TB-30ND WELD CLEANING FLUID FOR STAINLESS STEEL
- **Synonyms**: ENSITECH TB-30 ● TB 30

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 INC
- **Address**: 340 Marshall Avenue, Bldg#104, Aurora, Illinois, 60506, UNITED STATES
- **Telephone**: +1 630 405 6440
- **Fax**: +1 630 423 5979
- **Email**: info@tigbrush.com
- **Website**: www.tigbrush.com

1.4 Emergency telephone numbers
- **Emergency**: +1 352-323-3500

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.2 GHS Label elements
- **Signal word**: DANGER
- **Pictograms**

Hazard statements
- H316: Causes mild skin irritation.
- H318: Causes serious eye damage.

Prevention statements
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
2.3 Other hazards
No information provided.

NFPA

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPRIETARY INGREDIENT(S)</td>
<td>-</td>
<td>-</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>CITRIC ACID</td>
<td>77-92-9</td>
<td>201-069-1</td>
<td>&lt;30%</td>
</tr>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>36%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

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 the Poison Control Centre at 1-800-222-1222 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

Acute: Irritating to the eyes and skin. Delayed: No information available.

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 carbon oxides and hydrocarbons when heated to decomposition.
5.3 Advice for firefighters
Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. 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.

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. 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, heat or ignition sources 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Exposure standards
No exposure standards have been entered for this product.

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 nitrile or PVC or rubber gloves. |
| Body | When using large quantities or where heavy contamination is likely, wear coveralls. |
| Respiratory | Not required under normal conditions of use. |
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Appearance**: CLEAR GREEN LIQUID
- **Odour**: SWEET AND PLEASANT ODOUR
- **Flammability**: NON FLAMMABLE
- **Flash point**: NOT RELEVANT
- **Boiling point**: NOT AVAILABLE
- **Melting point**: NOT AVAILABLE
- **Evaporation rate**: NOT AVAILABLE
- **pH**: 1.5 to 2
- **Vapour density**: NOT AVAILABLE
- **Specific gravity**: SOLUBLE
- **Solubility (water)**: NOT AVAILABLE
- **Vapour pressure**: NOT RELEVANT
- **Upper explosion limit**: NOT RELEVANT
- **Lower explosion limit**: NOT AVAILABLE
- **Partition coefficient**: 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 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) and alkalis (e.g. sodium hydroxide).

10.6 Hazardous decomposition products
May evolve carbon oxides and hydrocarbons when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Information available for the ingredients:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This product is expected to be of low toxicity. Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITRIC ACID</td>
<td>3000 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rat)</td>
<td>--</td>
</tr>
</tbody>
</table>

**Skin**: This product has the potential to cause irritation due to its acidic nature. Mildly irritating to the skin.

**Eye**: This product has the potential to cause serious eye irritation due to its acidic nature. May be corrosive to ocular tissue.

**Sensitisation**: Available data is not considered sufficient for classification as a skin or respiratory sensitizer.

**Mutagenicity**: Not classified as a mutagen.

**Carcinogenicity**: Not classified as a carcinogen.

**Reproductive**: Not classified as a reproductive toxic.
TB-30ND WELD CLEANING FLUID FOR STAINLESS STEEL

STOT - single exposure
Not classified as causing organ damage from single exposure. However, over exposure may result in irritation of the nose and throat, with coughing.

STOT - repeated exposure
Not classified as causing organ damage from repeated exposure. Adverse effects are generally associated with single exposure.

Aspiration
Not classified as causing aspiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
May be harmful to aquatic species due to the effect of low pH.

12.2 Persistence and degradability
If citric acid is released to water, it is expected to biodegrade rapidly.

12.3 Bioaccumulative potential
This product is not expected to bioaccumulate.

12.4 Mobility in soil
The product is soluble in water.

12.5 Results of PBT and vPvB assessment
No information provided.

12.6 Other adverse effects
No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

<table>
<thead>
<tr>
<th>Waste disposal</th>
<th>Land Transport (DOT)</th>
<th>Sea Transport (IMDG / IMO)</th>
<th>Air Transport (IATA / ICAO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutralise with lime, anion exchanger or similar. For small amounts, flush to sewer with excess water or absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For large quantities, contact the manufacturer/supplier for additional information.</td>
<td>None allocated.</td>
<td>None allocated.</td>
<td>None allocated.</td>
</tr>
</tbody>
</table>

Legislation
Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

14.1 UN Number
None allocated.

14.2 Proper Shipping Name
None allocated.

14.3 Transport hazard class
None allocated.

14.4 Packing Group
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

US EPCRA and CAA Regulatory Information
The following components are subject to the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 112(r) of the Clean Air Act (CAA):

None of the components of this product are listed on the SARA/CERCLA/CASA lists.

Carcinogenicity

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF DOT, IMDG OR IATA
The following carcinogenic status applies:
None of the components of this product are listed on the NTP/IARC/OSHA lists.

Inventory listings
UNITED STATES: TSCA (US Toxic Substances Control Act)
All components are listed on the TSCA inventory, or are exempt.

16. OTHER INFORMATION

16.1 Additional information
EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

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.

16.2 Abbreviations
ACGIH American Conference of Governmental Industrial Hygienists
CAA Clean Air Act
CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CNS Central Nervous System
EC No. EC No - European Community Number
EMS Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPCRA Emergency Planning and Community Right-to-Know Act
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/m³ Milligrams per Cubic Metre
NTP U.S. National Toxicology Program
OEL Occupational Exposure Limit
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm Parts Per Million
RCRA Resource Conservation and Recovery Act
RQ Reportable Quantity measured in pounds (304, CERCLA)
SARA Superfund Amendments and Reauthorization Act
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
TPQ Threshold Planning Quantity measured in pounds (302)
TQ Threshold Quantity measured in pounds (CAA)
TWA Time Weighted Average
16.3 Summary Of Codes

RQ  Reportable Quantity measured in pounds (304, CERCLA)
TQ  Threshold Quantity measured in pounds (CAA)
TPQ Threshold Planning Quantity measured in pounds (302)
^  Reporting threshold has changed since November 1998.
+  Member of PAC category.
#  Member of diisocyanate category.
X  Indicates that this is a second name for a chemical already included on this consolidated list. May also indicate that the same chemical with the same CAS number appears on another list with a different chemical name.
*  RCRA carbamate waste: statutory one-pound RQ applies until RQs are adjusted.
** This chemical was identified from a Premanufacture Review Notice (PMN) submitted to EPA. The submitter has claimed certain information on the submission to be confidential, including specific chemical identity.
*** Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.

16.4 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.

16.5 Prepared by

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmtglobal.com


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