1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name: TB-50 FINISHING FLUID FOR STAINLESS STEEL
Synonyms: BRIGHTENER ● DEFROSTING COMPOUND ● WELDING APPLICATIONS

1.2 Uses and uses advised against

Uses: This product is for use only with the TIG Brush stainless steel cleaning system.

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

CLASSIFIED AS HAZARDOUS UNDER OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

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.
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.

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>ALKALINE SALT(S)</td>
<td>-</td>
<td>-</td>
<td>&lt;10%</td>
</tr>
<tr>
<td>TRIETHANOLAMINE</td>
<td>102-71-6</td>
<td>203-049-8</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>215-185-5</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>WATER</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>&gt;60%</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).
First aid facilities  Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed
Acute: Irritation of 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 toxic gases (carbon/ nitrogen oxides, amines, 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.

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, 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Reference</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>ACGIH TLV [USA]</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>OSHA PEL [USA]</td>
<td>--</td>
<td>2</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>ACGIH TLV [USA]</td>
<td>--</td>
<td>5</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

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.
Respiratory Where an inhalation risk exists, wear a Type A (Organic vapour) respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>CLEAR COLOURLESS LIQUID</td>
</tr>
<tr>
<td>Odour</td>
<td>CLEAN FRESH ODOUR</td>
</tr>
<tr>
<td>Flammability</td>
<td>NON FLAMMABLE</td>
</tr>
<tr>
<td>Flash point</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 100°C</td>
</tr>
<tr>
<td>Melting point</td>
<td>&lt; 0°C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>AS FOR WATER</td>
</tr>
<tr>
<td>pH</td>
<td>12 to 13</td>
</tr>
<tr>
<td>Vapour density</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1 (Approximately)</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>SOLUBLE</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>18 mm Hg @ 20°C</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Viscosity</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>NOT AVAILABLE</td>
</tr>
</tbody>
</table>

9.2 Other information

% Volatiles > 60 % (Water)

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 acids (e.g. nitric acid).

10.6 Hazardous decomposition products
May evolve toxic gases (carbon/ nitrogen oxides, amines, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects

Acute toxicity
No known toxicological effects from this product. Based on available data, the classification criteria are not met.

Information available for the ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE</td>
<td>6400 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rabbit)</td>
<td>--</td>
</tr>
</tbody>
</table>

Skin
This product has the potential to cause irritation due to its alkaline nature. Contact may result in irritation, redness, pain, rash, dermatitis and possible burns.

Eye
This product has the potential to cause irritation due to its alkaline nature. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible burns.

Sensitisation
Triethanolamine has the potential to cause allergic effects. However, available data is not considered sufficient for classification as a skin or respiratory sensitiser.

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
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 an aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment. May be hazardous to aquatic life due to the alkaline nature of the product.

12.2 Persistence and degradability
Expected to be biodegradable.

12.3 Bioaccumulative potential
Not expected to bioaccumulate.

12.4 Mobility in soil
The product is water soluble and may spread in water systems.

12.5 Results of PBT and vPvB assessment
Not classified as PBT or vPvB.

12.6 Other adverse effects
In soil and water, triethanolamine will biodegrade fairly rapidly following acclamation (half-life in the order of days to weeks). In soil, residual triethanolamine may leach to groundwater. LC50 (shrimp): > 100 ppm.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Waste disposal
Wearing the protective equipment detailed above, neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, dilute with excess water and flush to drain or absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).

Legislation
Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF DOT, IMDG OR IATA
TB-50 FINISHING FLUID FOR STAINLESS STEEL

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

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):

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Sara 302 (TPQ)</th>
<th>Sara 304 (RQ)</th>
<th>CERCLA (RQ)</th>
<th>Sara 313</th>
<th>RCRA Code</th>
<th>CAA (TQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Refer to Section 16 - Summary of Codes

Carcinogenicity
The following carcinogenic status applies:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIETHANOLAMINE</td>
<td>102-71-6</td>
<td></td>
<td>Group 3</td>
<td></td>
</tr>
</tbody>
</table>

Inventory listings
AUSTRALIA: AICS (Australian Inventory of Chemical Substances)
All components are listed on AICS, or are exempt.
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

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

WORKPLACE CONTROLS AND PRACTICES: Unless a less toxic chemical can be substituted for a hazardous substance, ENGINEERING CONTROLS are the most effective way of reducing exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Isolating operations can also reduce exposure. Using respirators or protective equipment is less effective than the controls mentioned above, but is sometimes necessary.

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.
c  Although not listed by name and CAS number, this chemical is reportable under one or more of the EPCRA section 313 chemical categories.
s  Indicates that this chemical is currently under an administrative stay of the EPCRA section 313 reporting requirements, therefore, no Toxics Release Inventory reports are required until the stay is removed.
!  Member of the dioxin and dioxin-like compounds category.

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.
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Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmtglobal.com


[ End of SDS ]