



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

**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 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](mailto:info@tigbrush.com)

**Website** [www.tigbrush.com](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

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.

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### 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.

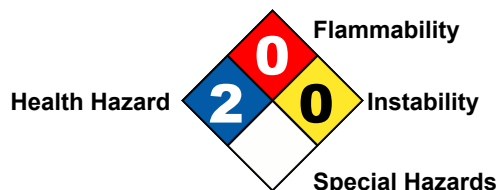
### Disposal statements

None allocated.

### 2.3 Other hazards

No information provided.

### NFPA



## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
PHOSPHORIC ACID	7664-38-2	231-633-2	23 to 24%
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	Remainder

## 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.

**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 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.

## 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 (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.

#### 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 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.

## 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 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

Ingredient	Reference	TWA		STEL	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Phosphoric acid	ACGIH TLV [USA]	--	1	--	3

### 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

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



## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 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
Evaporation rate	AS FOR WATER
pH	2.01
Vapour density	NOT AVAILABLE
Specific gravity	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)
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## 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** Based on available data, the classification criteria are not met.

#### 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)

**Skin** Irritating to the skin. Contact may result in irritation, redness, pain, rash, dermatitis and possible skin burns.

**Eye** Irritating to the eyes. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible burns.

**Sensitisation** Insufficient data for classification as a skin or respiratory sensitiser.

**Mutagenicity** Insufficient data available to classify as a mutagen.

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<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.

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**12. ECOLOGICAL INFORMATION**

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**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**

Phosphoric acid is hazardous to aquatic life at high concentrations. While acidity may be reduced by natural water minerals, the phosphate may persist indefinitely. 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.

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**13. DISPOSAL CONSIDERATIONS**

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**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.

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**14. TRANSPORT INFORMATION**

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

	LAND TRANSPORT (DOT)	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****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):

Ingredient	CAS Number	Sara 302 (TPQ)	Sara 304 (RQ)	CERCLA (RQ)	Sara 313	RCRA Code	CAA (TQ)
PHOSPHORIC ACID	7664-38-2			5000			

\* Refer to Section 16 - Summary of Codes

**Carcinogenicity**

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.

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**16. OTHER INFORMATION**

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**16.1 Additional information**

**ACIDS:** When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

**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.

**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.

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### 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/m <sup>3</sup>	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 a 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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**16.5 Prepared by**

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Prepared in accordance to OSHA Hazard Communication standard, 29 CFR 1920.1200.

**[ End of SDS ]**