## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>DECONTAMINATING FLUID FOR STAINLESS STEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>DECONTAMINATING FLUID FOR STAINLESS STEEL</td>
</tr>
</tbody>
</table>

### 1.2 Uses and uses advised against

<table>
<thead>
<tr>
<th>Uses</th>
<th>DECOMINANT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DECONTAMINATING FLUID FOR STAINLESS STEEL</td>
</tr>
</tbody>
</table>

### 1.3 Details of the supplier of the product

<table>
<thead>
<tr>
<th>Supplier name</th>
<th>ENSITECH INC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>340 Marshall Avenue, Bldg#104, Aurora, Illinois, 60506, UNITED STATES</td>
</tr>
<tr>
<td>Telephone</td>
<td>+1 630 405 6440</td>
</tr>
<tr>
<td>Fax</td>
<td>+1 630 423 5979</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:info@tigbrush.com">info@tigbrush.com</a></td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.tigbrush.com">www.tigbrush.com</a></td>
</tr>
</tbody>
</table>

### 1.4 Emergency telephone numbers

<table>
<thead>
<tr>
<th>Emergency</th>
<th>+1 352-323-3500</th>
</tr>
</thead>
</table>

## 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**

- Flammable Liquids: Category 3

**Health Hazards**

- Skin Corrosion/Irritation: Category 2
- Serious Eye Damage / Eye Irritation: Category 2A
- Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation)
- Specific Target Organ Toxicity (Single Exposure): Category 3 (Narcotic Effects)
- Carcinogenicity: Category 2
- Toxic to Reproduction: Category 1B
- Specific Target Organ Toxicity (Repeated Exposure): Category 2

**Environmental Hazards**

Not classified as an Environmental Hazard

### 2.2 GHS Label elements

<table>
<thead>
<tr>
<th>Signal word</th>
<th>DANGER</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Pictograms</th>
</tr>
</thead>
</table>

---

**SDS Date:** 11 Oct 2019  
**Version No:** 2.6
Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

Prevention statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statements
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment is advised - see first aid instructions.
P362 Take off contaminated clothing and wash before re-use.
P370 + P378 In case of fire: Use appropriate media for extinction.

Storage statements
P405 Store locked up.

Disposal statements
P501 Dispose of contents/container in accordance with relevant regulations.

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>1-BROMOPROPANE (N-PROPYL BROMIDE)</td>
<td>106-94-5</td>
<td>203-445-0</td>
<td>32%</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>16%</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>Not Available</td>
<td>&gt;50%</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.
**TB-02 DECONTAMINATING FLUID FOR STAINLESS STEEL**

**Inhalation**
If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). 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 are recommended.

### 4.2 Most important symptoms and effects, both acute and delayed
Acute: Irritation of eyes, respiratory system and skin. Delayed: May damage fertility or the unborn child.

### 4.3 Immediate medical attention and special treatment needed
Treat symptomatically.

---

**5. FIRE FIGHTING MEASURES**

5.1 **Extinguishing media**
Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 **Special hazards arising from the substance or mixture**
Flammable. May evolve toxic gases (carbon oxides, bromides, 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**
- Y: Risk of violent reaction or explosion. Wear full fire kit and breathing apparatus. Contain spill and run-off.

---

**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 and eliminate ignition sources. 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 tightly sealed 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 be bunded and have appropriate fire protection and ventilation systems.

7.3 **Specific end uses**
No information provided.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Reference</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>1-Bromopropane</td>
<td>ACGIH TLV [USA]</td>
<td>0.1</td>
<td>--</td>
</tr>
<tr>
<td>Ethanol</td>
<td>ACGIH TLV [USA]</td>
<td>1000</td>
<td>--</td>
</tr>
<tr>
<td>Ethanol</td>
<td>OSHA PEL [USA]</td>
<td>1000</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 explosion proof extraction ventilation is recommended.

PPE

Eye / Face
Wear splash-proof goggles.

Hands
Wear barrier gloves.

Body
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

Appearance       CLEAR PURPLE LIQUID
Odour            WOODY ODOUR
Flammability     FLAMMABLE
Flash point      27°C
Boiling point    NOT AVAILABLE
Melting point    -110°C
Evaporation rate NOT AVAILABLE
pH               6.8
Vapour density   4.3 (Air=1)
Specific gravity > 1
Solubility (water) NOT AVAILABLE
Vapour pressure  NOT AVAILABLE
Upper explosion limit 19.0 % (Ethanol)
Lower explosion limit 3.3 % (Ethanol)
Partition coefficient NOT AVAILABLE
Autoignition temperature 490°C (N-Propyl Bromide)
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 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), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products
May evolve toxic gases (carbon oxides, bromides, hydrocarbons) 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.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-BROMOPROPANE (N-PROPYL BROMIDE)</td>
<td>3600 mg/kg (rat)</td>
<td>&gt; 2000 mg/kg (rat)</td>
<td>19700 mg/m³ (rat)</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>3450 mg/kg (mouse)</td>
<td>--</td>
<td>20000 ppm/10 hours (rat)</td>
</tr>
</tbody>
</table>

Skin
Irritating to the skin. Contact may result in drying and defatting of the skin, rash and dermatitis.

Eye
Causes serious eye irritation. Contact may result in irritation, lacrimation, pain and redness.

Sensitisation
Not classified as causing skin or respiratory sensitisation.

Mutagenicity
Not classified as a mutagen.

Carcinogenicity
Suspected of causing cancer.

Reproductive
May damage fertility or the unborn child. Reproductive and developmental effects were reported in repeat dose inhalation toxicity studies in rats.

STOT - single exposure
Irritating to the respiratory system. Over exposure may result in irritation of the nose and throat, coughing and headache. High level exposure may result in dizziness, nausea and drowsiness.

STOT - repeated exposure
Repeated exposure to 1-bromopropane may result in central nervous system (CNS), liver and kidney damage. Repeated exposure to ethanol may result in CNS effects and cirrhosis of the liver.

Aspiration
Not classified as causing asptiration.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
May be harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability
N-Propyl Bromide is not readily biodegradable.

12.3 Bioaccumulative potential
Not expected to bioaccumulate.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No information provided.

12.6 Other adverse effects
Aliphatic hydrocarbons behave differently in the environment depending on their size. WATER: Light aliphatics volatilise rapidly from water (half life - few hours). Bioconcentration should not be significant. SOIL: Light aliphatics biodegrade quickly in soil and water, heavy aliphatics biodegrade very slowly. ATMOSPHERE: Vapour-phase aliphatics will degrade by reaction with hydroxyl radicals.
13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal
For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information if disposing of large quantities (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

Legislation
Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF DOT, IMDG AND/OR IATA

<table>
<thead>
<tr>
<th>LAND TRANSPORT (DOT)</th>
<th>SEA TRANSPORT (IMDG / IMO)</th>
<th>AIR TRANSPORT (IATA / ICAO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN Number</td>
<td>2344</td>
<td>2344</td>
</tr>
<tr>
<td>14.2 Proper Shipping Name</td>
<td>BROMOPROPANES</td>
<td>BROMOPROPANES</td>
</tr>
<tr>
<td>14.3 Transport hazard class</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>14.4 Packing Group</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Not a Marine Pollutant

14.6 Special precautions for user

EMS
F-E, S-D

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>1-BROMOPROPANE (N-PROPYL BROMIDE)</td>
<td>106-94-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SARA 302</strong></td>
<td><strong>313</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SARA 304</strong></td>
<td><strong>3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SARA 313</strong></td>
<td><strong>3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RCRA CODE</strong></td>
<td><strong>122</strong></td>
<td></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>ETHANOL</td>
<td>64-17-5</td>
<td></td>
<td>Group 1</td>
<td></td>
</tr>
</tbody>
</table>

Inventory listings
AUSTRALIA: AICS (Australian Inventory of Chemical Substances)
All components are listed on AICS, or are exempt.
EUROPE: EINECS (European Inventory of Existing Chemical Substances)
All components are listed on EINECS, 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
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: 1-BROMOPROPANE (N-PROPYL BROMIDE).

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ</td>
<td>Reportable Quantity measured in pounds (304, CERCLA)</td>
</tr>
<tr>
<td>TQ</td>
<td>Threshold Quantity measured in pounds (CAA)</td>
</tr>
<tr>
<td>TPQ</td>
<td>Threshold Planning Quantity measured in pounds (302)</td>
</tr>
<tr>
<td>^</td>
<td>Reporting threshold has changed since November 1998.</td>
</tr>
<tr>
<td>+</td>
<td>Member of PAC category.</td>
</tr>
<tr>
<td>#</td>
<td>Member of diisocyanate category.</td>
</tr>
<tr>
<td>X</td>
<td>Indicate 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.</td>
</tr>
<tr>
<td>#</td>
<td>Indicates that 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.</td>
</tr>
<tr>
<td>^</td>
<td>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.</td>
</tr>
<tr>
<td>c</td>
<td>Although not listed by name and CAS number, this chemical is reportable under one or more of the EPCRA section 313 chemical categories.</td>
</tr>
<tr>
<td>s</td>
<td>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.</td>
</tr>
<tr>
<td>!</td>
<td>Member of the dioxin and dioxin-like compounds category.</td>
</tr>
</tbody>
</table>

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

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


[ End of SDS ]