

# TURI Surface Cleaning Laboratory CLEANING CHEMICAL QUESTIONNAIRE

See letter for submission instructions.

Material Safety Data Sheet (MSDS)  
MUST Be Attached  
(and Technical Data Sheet, if available)

1. Product/Trade Name (Please use a separate questionnaire for each cleaning chemical you want listed in the Directory)  
SIG T MAX Generic Chemical Family: TERPENE

Meets Specified Standard(s): ASTM: \_\_\_\_\_ Mil Spec: \_\_\_\_\_ FDA: \_\_\_\_\_ Other: \_\_\_\_\_

Primary Cleaner Classification (Check only one):

- |                                           |                                                  |                                           |                                       |
|-------------------------------------------|--------------------------------------------------|-------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Acidic Aqueous   | <input checked="" type="checkbox"/> Semi-Aqueous | <input type="checkbox"/> Powder detergent | <input type="checkbox"/> Extracting   |
| <input type="checkbox"/> Neutral Aqueous  | <input checked="" type="checkbox"/> Terpene      | <input type="checkbox"/> Enzymatic/       | <input type="checkbox"/> HCFC         |
| <input type="checkbox"/> Alkaline Aqueous | <input type="checkbox"/> Petroleum distillate    | <input type="checkbox"/> Microbial        | <input type="checkbox"/> Alcohol      |
| <input type="checkbox"/> Caustic          | <input type="checkbox"/> Organic                 | <input type="checkbox"/> Blasting         | <input type="checkbox"/> Other: _____ |

2. Chemical Constituents (Check all that apply & specify) Example ☒ Builder: Sodium Hydroxide 50% (as Concentrate)

Cleaner Containing: At Least Some Water ( \_\_\_\_\_ %) OR ☒ No/Minimal Water

|                                                       |                                                          |                                                     |
|-------------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> Builder: _____               | <input type="checkbox"/> Water conditioner/Sequestering/ | <input type="checkbox"/> Supercritical fluid: _____ |
| <input checked="" type="checkbox"/> Surfactant: _____ | Chelating agent: _____                                   |                                                     |
| <input type="checkbox"/> Emulsifier: _____            | <input type="checkbox"/> Corrosion inhibitor/Rust        | <input type="checkbox"/> Blasting medium: _____     |
| <input type="checkbox"/> Saponifier: _____            | prohibitor: _____                                        |                                                     |
| <input type="checkbox"/> Other: _____                 | <input type="checkbox"/> Anti-microbial: _____           | <input type="checkbox"/> Other: _____               |
| <input type="checkbox"/> Rinse aid/Silicate: _____    |                                                          |                                                     |

3. Industrial Applications (Number all that apply, Most Used = 1)

- |                                                        |                                                       |                                                |                                                                     |
|--------------------------------------------------------|-------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Aerospace/Military | <input checked="" type="checkbox"/> Metal Finishing   | <input type="checkbox"/> PCBs                  | <input type="checkbox"/> Semiconductors                             |
| <input checked="" type="checkbox"/> Cleanrooms         | <input checked="" type="checkbox"/> Metal Fabrication | <input checked="" type="checkbox"/> Plastics   | <input checked="" type="checkbox"/> General Cleaning (floors, etc.) |
| <input type="checkbox"/> Basic Electronics             | <input checked="" type="checkbox"/> Optics            | <input type="checkbox"/> Precision Instruments | <input type="checkbox"/> Maint./Repair (engines, etc.)              |
| <input checked="" type="checkbox"/> Medical            | <input type="checkbox"/> Painting                     | <input checked="" type="checkbox"/> Printing   | <input type="checkbox"/> Other: _____                               |

4. Contaminant Removal (Check all that apply & specify, if possible)

Example ☒ Coatings Conformal

- |                                                       |                                                     |                                                  |                                                    |                                           |
|-------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------|----------------------------------------------------|-------------------------------------------|
| <input checked="" type="checkbox"/> Adhesives         | <input type="checkbox"/> Coatings                   | <input checked="" type="checkbox"/> Greases      | <input checked="" type="checkbox"/> Mold releases/ | <input type="checkbox"/> Rust/Scale       |
| <input checked="" type="checkbox"/> Buffing/polishing | <input checked="" type="checkbox"/> Cutting/tapping | <input checked="" type="checkbox"/> Inks         | Silicones                                          | <input checked="" type="checkbox"/> Waxes |
| compounds                                             | fluids                                              | <input checked="" type="checkbox"/> Lubricating/ | <input type="checkbox"/> Paints                    | <input type="checkbox"/> Other: _____     |
| <input type="checkbox"/> Carbon deposits              | <input type="checkbox"/> Fluxes                     | lapping oils                                     | <input checked="" type="checkbox"/> Resins/Rosins  |                                           |

5. Substrate Compatibility (Check all that apply)

Example ☒ Rubber

- |                                                             |                                                      |                                                              |                                            |
|-------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------|
| <input checked="" type="checkbox"/> Aluminum                | <input type="checkbox"/> Carbon steel                | <input checked="" type="checkbox"/> Glass/quartz             | <input checked="" type="checkbox"/> Nickel |
| <input checked="" type="checkbox"/> Alloys (Specify): _____ | <input checked="" type="checkbox"/> Ceramics         | <input checked="" type="checkbox"/> Gold                     | <input checked="" type="checkbox"/> Tin    |
|                                                             | <input checked="" type="checkbox"/> Copper           | <input checked="" type="checkbox"/> Plastic (Specify): _____ | <input type="checkbox"/> Other: _____      |
| <input checked="" type="checkbox"/> Brass                   | <input checked="" type="checkbox"/> Galvanized steel | <input checked="" type="checkbox"/> Sterling/silver          |                                            |

6. Equipment Compatibility (Check all that apply & specify, if applicable)

Example ☒ Low Pressure Spray 0-200 psi-range

- |                                                    |                                                          |                                                              |
|----------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------|
| <input checked="" type="checkbox"/> Cold Solvent   | <input checked="" type="checkbox"/> Mechanical Agitation | <input type="checkbox"/> High Pressure Spray _____ psi-range |
| <input type="checkbox"/> Vapor Degreasing          | <input checked="" type="checkbox"/> Ultrasonics          | <input type="checkbox"/> Other: _____                        |
| <input checked="" type="checkbox"/> Manual Wipe    | <input type="checkbox"/> Media Blasting                  |                                                              |
| <input checked="" type="checkbox"/> Immersion/Soak | <input type="checkbox"/> Supercritical Extract           |                                                              |

7. Recommended Concentrations: 1% to 50% Percent Volume (range)

Recommended Temperatures: AMBIENT Deg. F (range)

8. Important Physical and Chemical Properties:

Maximum theoretical VOC content: 780 gms/litre  
GWP: 0 Surface Tension: 25 dynes/cm.  
ODP: 0 Kb value: 95 Density: 7lbs/gall  
Other: \_\_\_\_\_

9. Cost per pound/gallon: Smallest-unit price: \$26.60/g Large-volume price: \$23.50/g US\$

10. Additional pertinent information not found elsewhere on this form or MSDS:

(55 dwn.)

## Surface Cleaning Laboratory

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FAX: (508) 934-3050

## CLEANING CHEMISTRY QUESTIONNAIRE

The Toxics Use Reduction Institute maintains a vendor database of alternative cleaning chemistries, cleaning equipment and recycling/treatment equipment. The information listed below has previously been provided by you. Please make any necessary corrections and include any information that has not been supplied. Blank questionnaires are also included for any additional products that you would like to add to the database.

Return responses to: Jay Janikauskas  
Toxics Use Reduction Institute  
University of Massachusetts-Lowell  
One University Avenue  
Lowell, MA 01854-2886

Trade Name of Product Bio T Max  
Company Name EnviroSolutions, Inc.  
Street Address 2 Corporate Drive, Suite 210 Trumbull CT 06611  
Contact Person/Title David Bate / President Telephone 203-452-7225 Fax 203-

Provide a general description of your product and its uses.

462-8321

Terpene solvent which is water soluble.

Please check the classification that describes your product.

- |                                                  |                                                       |
|--------------------------------------------------|-------------------------------------------------------|
| <input type="checkbox"/> Saponified Aqueous      | <input type="checkbox"/> Petroleum Distillates        |
| <input checked="" type="checkbox"/> Semi-Aqueous | <input type="checkbox"/> Organic                      |
| <input type="checkbox"/> Alkaline Aqueous        | <input type="checkbox"/> HCFC                         |
| <input checked="" type="checkbox"/> Terpene      | <input type="checkbox"/> Powder Detergent             |
| <input type="checkbox"/> Acidic Aqueous          | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Caustic                 |                                                       |

Please check the appropriate industries in which your product is used.

- |                                                                 |                                                                      |
|-----------------------------------------------------------------|----------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Metal Fabrication/Finishing | <input checked="" type="checkbox"/> Precision Instruments            |
| <input checked="" type="checkbox"/> Electronics/PCB's           | <input checked="" type="checkbox"/> Medical                          |
| <input type="checkbox"/> Electronics/Semiconductor              | <input checked="" type="checkbox"/> General Cleaning/Maintenance     |
| <input type="checkbox"/> General Electronics                    | <input type="checkbox"/> Chemical Industry (tank & piping boil outs) |
| <input checked="" type="checkbox"/> Military                    | <input type="checkbox"/> Other (please specify) _____                |
| <input checked="" type="checkbox"/> Printing                    |                                                                      |

Please check the contaminants that your product is known to remove.

- |                                                                                                |                                                     |                                           |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|
| <input checked="" type="checkbox"/> Adhesives                                                  | <input checked="" type="checkbox"/> Inks            | <input type="checkbox"/> Rust             |
| <input checked="" type="checkbox"/> Buffing/polishing/lapping compounds                        | <input checked="" type="checkbox"/> Greases         | <input type="checkbox"/> Scale            |
| <input type="checkbox"/> Carbon Deposits                                                       | <input type="checkbox"/> Mold Release               | <input type="checkbox"/> Silicones        |
| <input checked="" type="checkbox"/> Conformal Coatings                                         | <input checked="" type="checkbox"/> Oils            | <input checked="" type="checkbox"/> Waxes |
| <input checked="" type="checkbox"/> Fluxes                                                     | <input checked="" type="checkbox"/> Paints/coatings |                                           |
| <input checked="" type="checkbox"/> Other (please specify) <u>DAK, ASPHALT, LATEX RESIDUES</u> |                                                     |                                           |
| <u>GLUE, INK'S</u>                                                                             |                                                     |                                           |



Please check the materials with which your product is compatible.

- ☒ Electronics
- ☒ Ferrous Metals
- ☒ Plastics
- ☒ Rubber

- ☒ Precious Metals (Gold, Silver)
- ☒ Copper and Brass
- ☒ Aluminum and Aluminum Alloys

Please check the following cleaning processes with which your product is compatible.

- ☒ High Pressure Spray
- ☒ Low Pressure Spray
- ☒ Immersion
- ☒ Ultrasonics

- ☐ Steam Cleaning
- ☒ Cold Solvent Cleaning
- ☐ Vapor Degreasing

Is your product designed to emulsify, dissolve or displace contaminants? (circle one)

If water dilutable, what is the recommended concentration range that your product may be used at?  
5-50%

What is the recommended temperature range that your product may be used at?

Ambient Temp - 40 → 75° F.

Heated to 120° F  
for Pressure  
Spray.

Check off the following that your chemistry contains.

- ☒ Rinse Aids
- ☐ Silicates
- ☐ Sequestering Agents

- ☐ Anti-foam Agents
- ☐ Corrosion Inhibitors
- ☐ Caustic

What is the average price of your product per gallon or lb? \$21.00/gal

Does your product meet any cleaning standards (ASTM, military or aircraft specs, FDA approval, etc.). If so please list.

## Physical Properties

Percent Volatile: \_\_\_\_\_

Flash Point: 140 F (OC) \_\_\_\_\_

Vapor Pressure: <2 mmHg \_\_\_\_\_

pH of Concentrate: 7.5-8.5 \_\_\_\_\_

Surface Tension: \_\_\_\_\_

Maximum Theoretical VOC Content: \_\_\_\_\_

HMS Ratings:

Health: 0

Flammability: 2

Reactivity: 0