



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)

D3

1. Product/Trade Name (Please use a separate questionnaire for each cleaning chemical you want listed in the Directory)

BioSolve®

Generic Chemical Family: Surfactant

Meets Specified Standard(s): ASTM: 0-930 Mil Spec: 4850-01-453 FDA: USDA A-2 Other: ABS Listed

Primary Cleaner Classification (Check only one):

- | | | | |
|---|---|---|-------------------------------------|
| ☐ Acidic Aqueous | ☐ Semi-Aqueous | ☐ Powder detergent | ☐ Extracting |
| ☒ Neutral Aqueous | ☐ Terpene | ☐ Enzymatic/ | ☐ HCFC |
| ☐ Alkaline Aqueous | ☐ Petroleum distillate | ☐ Microbial | ☐ Alcohol |
| ☐ Caustic | ☐ Organic | ☐ Blasting | ☐ 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

- | | | |
|---|--|---|
| ☐ Builder: | ☐ Water conditioner/Sequestering/ | ☐ Supercritical fluid: |
| ☐ Surfactant: | Chelating agent: | |
| ☒ Emulsifier: <u>alkylester Nonylphenol</u> | ☐ Corrosion inhibitor/Rust | ☐ Blasting medium: |
| ☒ Saponifier: <u>Tell Oil Derivative</u> | prohibitor: | |
| ☒ Other: <u>T.M.</u> | ☐ Anti-microbial: | ☐ Other: |
| ☐ Rinse aid/Silicate: | | |

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

- | | | | |
|--|---|--|---|
| ☒ Aerospace/Military | ☐ Metal Finishing | ☐ PCBs | ☐ Semiconductors |
| ☐ Cleanrooms | ☒ Metal Fabrication | ☒ Plastics | ☒ General Cleaning (floors, etc.) |
| ☐ Basic Electronics | ☐ Optics | ☐ Precision Instruments | ☒ Maint./Repair (engines, etc.) |
| ☐ Medical | ☒ Painting | ☒ Printing | ☐ Other: <u>Hydrocarbon Clean Up</u> |

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

- | | | | |
|--|---|--|---|
| ☒ Adhesives | ☐ Coatings | ☒ Greases | Example ■ Coatings <u>Conformal</u> |
| ☐ Buffing/polishing compounds | ☐ Cutting/tapping fluids | ☒ Inks | ☐ Mold releases/ |
| ☒ Carbon deposits | ☐ Fluxes | ☒ Lubricating/lapping oils | ☐ Silicones |
| | | | ☒ Paints |
| | | | ☐ Resins/Rosins |
| | | | ☒ Other: <u>Hydrocarbon Derivatives</u> |

5. Substrate Compatibility (Check all that apply)

- | | | | | |
|--|--|---|---|--|
| ☒ Aluminum | ☐ Carbon steel | ☐ Glass/quartz | ☒ Rubber | ☒ Nickel |
| ☐ Alloys (Specify): | ☒ Ceramics | ☐ Gold | ☒ Stainless steel | ☒ Tin |
| ☐ Brass | ☐ Copper | ☐ Plastic (Specify): | ☒ Steel | ☐ Other: |
| | ☒ Galvanized steel | | ☐ Sterling/silver | |

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

- | | | |
|--|--|--|
| ☒ Cold Solvent | ☒ Mechanical Agitation | ☒ Low Pressure Spray <u>45</u> psi-range |
| ☒ Vapor Degreasing | ☒ Ultrasonics | ☒ High Pressure Spray <u>1000-2500</u> psi-range |
| ☒ Manual Wipe | ☐ Media Blasting | ☐ Other: |
| ☒ Immersion/Soak | ☐ Supercritical Extract | |

7. Recommended Concentrations: 2% → 6% Percent Volume (range)

Recommended Temperatures: 35° - 185° F Deg. F (range)

8. Important Physical and Chemical Properties:

Maximum theoretical VOC content:

GWP: 0 Surface Tension: 47 dyne/cm @ 25°C Density: 8.37 LBS/Gallon

ODP: 0 Kb value: unknown Other:

9. Cost per pound/gallon: Smallest-unit price: \$30/gallon concentrate Large-volume price: \$28/Gallon concentrate US\$

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

BioSolve® is biodegradable, contains no hazardous ingredients as defined by CERCLA or Mass Right to Know Law.