



TURI SURACE CLEANING LABORATORY CLEANING CHEMICAL QUESTIONNAIRE

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

See letter for submission instructions.

1. Product/Trade Name (Please use a separate questionnaire for each cleaning chemical you want listed in the Directory)
CO₂ Snow Jet Generic Chemical Family: _____

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

- Primary Cleaner Classification (Check only one):
- | | | | |
|---|---|---|--|
| <input type="checkbox"/> Acidic Aqueous | <input type="checkbox"/> Semi-Aqueous | <input type="checkbox"/> Powder detergent | <input type="checkbox"/> Extracting |
| <input type="checkbox"/> Neutral Aqueous | <input type="checkbox"/> Terpene | <input type="checkbox"/> Enzymatic/ Microbial | <input type="checkbox"/> HCFC |
| <input type="checkbox"/> Alkaline Aqueous | <input type="checkbox"/> Petroleum distillate | <input checked="" type="checkbox"/> Blasting | <input type="checkbox"/> Alcohol |
| <input type="checkbox"/> Caustic | <input type="checkbox"/> Organic | | <input checked="" type="checkbox"/> Other: <u>CO₂</u> |

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/Chelating agent: _____ | <input type="checkbox"/> Supercritical fluid: <u>CO₂ (not really)</u> |
| <input type="checkbox"/> Surfactant: _____ | <input type="checkbox"/> Corrosion inhibitor/Rust prohibitor: _____ | <input type="checkbox"/> Blasting medium: <u>CO₂</u> |
| <input type="checkbox"/> Emulsifier: _____ | <input type="checkbox"/> Anti-microbial: _____ | <input type="checkbox"/> Other: <u>CO₂ snow</u> |
| <input type="checkbox"/> Saponifier: _____ | | |
| <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 type="checkbox"/> Metal Finishing | <input type="checkbox"/> PCBs | <input checked="" type="checkbox"/> Semiconductors |
| <input type="checkbox"/> Cleanrooms | <input type="checkbox"/> Metal Fabrication | <input type="checkbox"/> Plastics | <input 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 type="checkbox"/> Medical | <input type="checkbox"/> Painting | <input type="checkbox"/> Printing | <input checked="" type="checkbox"/> Other: <u>Pre-wash</u> |

4. Contaminant Removal (Check all that apply & specify, if possible) Example Coatings Conformal
- | | | | | |
|--|--|--|--|---|
| <input type="checkbox"/> Adhesives | <input type="checkbox"/> Coatings | <input checked="" type="checkbox"/> Greases | <input type="checkbox"/> Mold releases/Silicones | <input type="checkbox"/> Rust/Scale |
| <input type="checkbox"/> Buffing/polishing compounds | <input checked="" type="checkbox"/> Cutting/tapping fluids | <input type="checkbox"/> Inks | <input type="checkbox"/> Paints | <input type="checkbox"/> Waxes |
| <input type="checkbox"/> Carbon deposits | <input type="checkbox"/> Fluxes | <input checked="" type="checkbox"/> Lubricating/lapping oils | <input type="checkbox"/> Resins/Rosins | <input checked="" type="checkbox"/> Other: <u>Resin</u> |

5. Substrate Compatibility (Check all that apply)
- | | | | | |
|---|--|---|--|--|
| <input type="checkbox"/> Aluminum | <input type="checkbox"/> Carbon steel | <input type="checkbox"/> Glass/quartz | <input type="checkbox"/> Rubber | <input checked="" type="checkbox"/> Nickel |
| <input checked="" type="checkbox"/> Alloys (Specify): _____ | <input checked="" type="checkbox"/> Ceramics | <input type="checkbox"/> Gold | <input type="checkbox"/> Stainless steel | <input checked="" type="checkbox"/> Tin |
| <input type="checkbox"/> Brass | <input checked="" type="checkbox"/> Copper | <input type="checkbox"/> Plastic (Specify): _____ | <input type="checkbox"/> Steel | <input type="checkbox"/> Other: _____ |
| | <input checked="" type="checkbox"/> Galvanized steel | | <input type="checkbox"/> Sterling/silver | |

6. Equipment Compatibility (Check all that apply & specify, if applicable)
- | | | |
|---|--|---|
| <input type="checkbox"/> Cold Solvent | <input type="checkbox"/> Mechanical Agitation | <input checked="" type="checkbox"/> Low Pressure Spray <u>80-85</u> psi-range |
| <input type="checkbox"/> Vapor Degreasing | <input type="checkbox"/> Ultrasonics | <input type="checkbox"/> High Pressure Spray _____ psi-range |
| <input type="checkbox"/> Manual Wipe | <input checked="" type="checkbox"/> Media Blasting | <input type="checkbox"/> Other: <u>CO₂ Snow</u> |
| <input type="checkbox"/> Immersion/Soak | <input type="checkbox"/> Supercritical Extract | |

7. Recommended Concentrations: _____ Percent Volume (range)
Recommended Temperatures: Room T Deg. F (range)

8. Important Physical and Chemical Properties:
- Maximum theoretical VOC content: _____
- GWP: _____ Surface Tension: _____ Density: _____
ODP: _____ Kb value: _____ Other: _____

9. Cost per pound/gallon: Smallest-unit price: 5.4/16 Large-volume price: _____ US\$

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