



## DURALIFE® CQS HEAVY DUTY FULL SYNTHETIC COOLANT

**Duralife® CQS Heavy Duty Full Synthetic Coolant** is a premium quality, water-soluble, oil free, heavy duty synthetic coolant developed for slicing, dicing, drilling, sawing, grinding, lapping of **silicon wafers, quartz, optics, plastic & composites, glass and other ceramic materials** to provide unique extreme pressure lubrication and part finishes in modern CNC machining operations. It is specially designed with a special corrosion protection package and a biocide package to provide outstanding system protection and minimize the friction and heat between the tools and parts.

### APPLICATIONS:

**Duralife® CQS Heavy Duty Full Synthetic Coolant** is recommended for use in CNC Machining, Lathes, Machining Centers, High Speed & High Pressure Machining.

**Duralife® CQS Heavy Duty Full Synthetic Coolant** should be diluted with deionized (DI) water to a concentration of 5% to 10% (volume%) depending on the machining operation and type of material.

*Note: Always premix coolant before adding to the machine sump. Never add straight water or straight concentrate coolant directly to the machine sump. If mixing by hand, always add concentrate coolant to water, and then agitate.*

*Coolant concentration may be monitored with a refractometer.*

### BENEFITS:

- Provides excellent lubrication without oil.
- Prevents foaming at high pressure and provides protection against rust and corrosion.
- No effects on machine tool parts, including paint and seals.
- Excellent rejection of foreign contamination, including tramp oils.
- Improved hard water stability, due to the absence of phosphates.
- Biocide package controls bacteria & fungi.
- Non-toxic, Non-irritating, Non-corrosive. Biodegradable and poses no environmental or health risks.

### TYPICAL CHARACTERISTICS :

| Test                             | Method     | Typical Results |
|----------------------------------|------------|-----------------|
| Appearance                       | -          | Clear, Blue     |
| PH (concentrate)                 | ASTM D1287 | 9.3             |
| Specific Gravity @ 15.6°C (60°F) | ASTM D1298 | 1.03            |
| Pour Point, °C(°F)               | ASTM D97   | -18 (0)         |
| Boiling point, °C (°F)           | ASTM D1120 | 100 (212)       |
| Vapor Pressure, mmHg@ 25 °C      | -          | <0.01           |

*The above characteristics are average values based on recent production. Minor variations which do not affect product performance are to be expected in normal manufacture .*

Table 1: % Concentration vs. Refractive Reading for CQS Synthetic Coolant

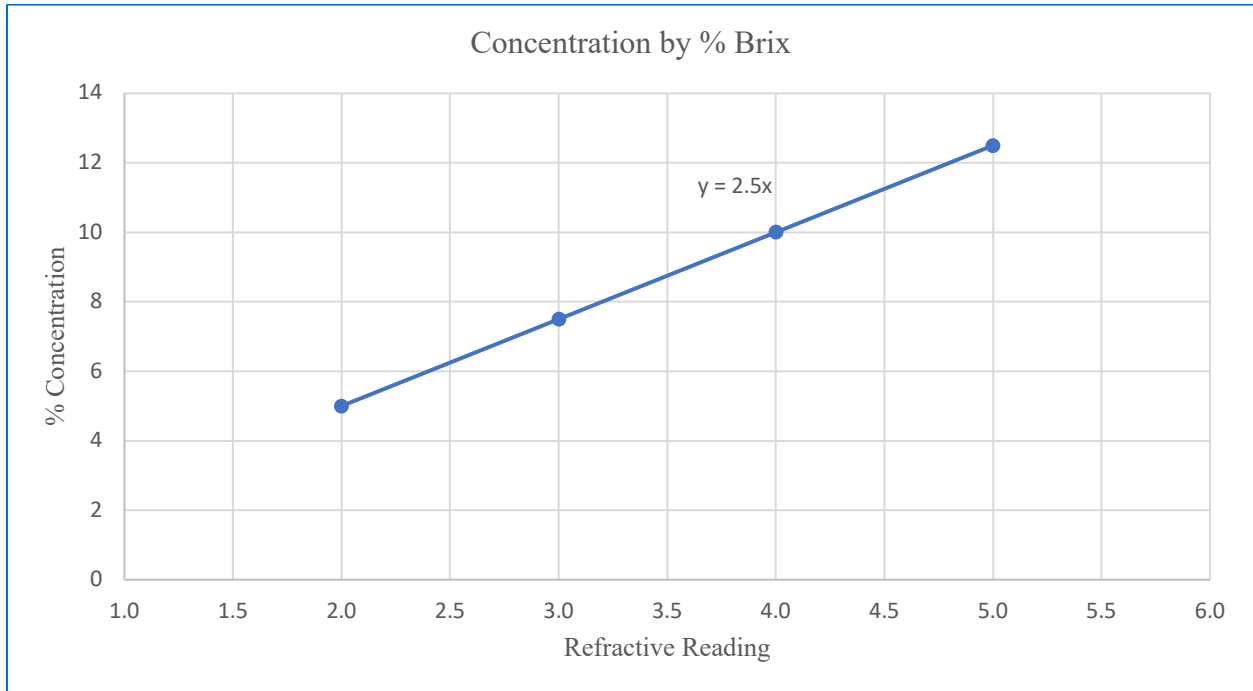


Table 2: % Brix Measurements at Various Dilutions in Distilled Water

| Concentration Dilution Table |         |     |
|------------------------------|---------|-----|
| 5%                           | 1:20    | 2.0 |
| 7.5%                         | 1:13.33 | 3.0 |
| 10%                          | 1:10    | 4.0 |
| 12.5%                        | 1:8     | 5.0 |

**WARNING:**

For information on the safe handling and use of this product, please refer to its Safety Data Sheet at *SDS Number 12128 database on our website* at [www.amtecol.com](http://www.amtecol.com) or scan the code for a direct link

