

## **DURASOL VELF**

High performance, Low Foam High Oil semi-synthetic water extendable cutting fluid designed to give a long-life, bio-resistant and ultra-stable emulsion. VELF also contains sophisticated "extreme pressure" additives to ensure an excellent cutting performance.

### **FEATURES & BENEFITS**

- ✓ Excellent "EP" performance
- ✓ Outstanding Low foam / low misting characteristics
- ✓ Low top up rate
- ✓ Significant cost reduction
- ✓ Operator friendly
- ✓ Outstanding anti-corrosion properties



### **CREATED TO TAKE ON THE DIFFICULT**

Suitable for use in both soft and hard water and for the use on a wide range of difficult materials. The product is truly a 'multi-metal' fluid and is the perfect choice for all modern manufacturing, including automotive, aerospace and high end manufactured components.

### **DESIGNED TO GIVE OUTSTANDING PERFORMANCE**

Unrivalled EP cutting performance allows the grade to be used in all types of arduous manufacturing applications. The blend of EP performance additives provides outstanding surface finish and tool life on all types of aluminum, yellow metals and both ferrous and non-ferrous materials. The unique formulation prevents scum and soap formation associated with more reactive materials. The product has outstanding tramp oil rejection properties which means excellent cleanliness of the machine tool can be maintained.

**Durasol VELF** is specifically designed to be used in high pressure systems and small sumps where persistent foam presents problems.

### **LOW FOAMING AS STANDARD**

The unique low foam emulsifier system does not rely on traditional antifoams for foam control. The emulsion when in use produces 50% less foam compared to similar emulsion types with a 50% repeatable rapid increase in foam collapse. To be used in both soft and hard water conditions from 0ppm – 750ppm.

## MATERIALS & PERFORMANCE

Material types	Performance rating	Applications	Dilution
Titanium	****	Tapping	8-10%
Aluminium	****	Milling	5-7%
Aero aluminium alloys	****	Turning	5-7%
High alloy/stainless steel	****	Reaming	8-10%
Copper/brass	****	Sawing	5-7%
Cast iron	***	Drilling	8-10%
Ferrous Materials	****	Grinding	4-6%

## TYPICAL PHYSICAL PROPERTIES

Appearance	Amber liquid
Emulsion Type	Semi-Translucent (Milky)
Foaming Tendency @ 5% emulsion in 50ppm water	Nil foam after 5 seconds
Specific Gravity at 20°C	0.95 typical
pH @ 5%	9.2 typical
Refractometer Factor	1.2
IP 287 Corrosion Break Point, % Volume:	2.0
Reichert Lubricity Characteristics at 10% dilution;	
Noise Reduction (metres)	20
Load Bearing Capacity (Kg/mm <sup>2</sup> )	2.05

### PRODUCT MANAGEMENT

Teklube advise the use of automated mixing systems. If mixing manually, always add the concentrate to the water with maximum agitation, if water is added to the concentrate, the emulsions may prove unstable. Avoid mixing with very cold concentrate or water. Check emulsion strength using a calibrated refractometer. Details of where to purchase equipment and how to use it are available from the Teklube Technical Department.

### PRODUCT MANAGEMENT

The working concentration should be carefully controlled and monitored on a daily basis as higher and lower working concentrations have health and safety implications. Machines should be cleaned out regularly. Fluid and particulate contaminants should be kept to a minimum. This is important especially in terms of bacterial control and is in line with the latest advice from government and professional sources. Detailed reference sources are quoted in the

### STORAGE

- ✓ Store in a cool, well ventilated area
- ✓ Store inside, between 10°C and 30°C
- ✓ Store away from direct heat and frost
- ✓ Avoid water collecting on the barrel top
- ✓ Shelf life 12 months from the date of manufacture