

DURASOL HD-CS

Durasol HD-CS is a truly versatile Multi-functional semi-synthetic metal process fluid which produces a Milky micro emulsion when diluted in water.

FEATURES & BENEFITS

- ✓ Based Upon Renewable Technology
- ✓ Excellent Arduous Machining Characteristics
- ✓ Chlorine & Secondary Amine Free
- ✓ Triazine Free
- ✓ NP Ethoxylates Free
- ✓ Multi-Functional
- ✓ Low Foaming Tendency
- ✓ Multi-Metal Compatible
- ✓ Good levels of Boundary Lubrication



CREATED TO TAKE ON THE DIFFICULT

Suitable for use in both moderately 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

Durasol HD-CS is based upon synthetic and natural esters in addition to surface active components, in order to provide excellent machining and performance across a wide range of arduous machining applications.

Durasol HD-CS produces a Milky micro emulsion which allows for excellent visibility for the machine operator and has a low foaming tendency which allows for use in the most arduous modern day machining centres.

Multi-functional performance

Durasol HD-CS has been developed to exhibit full multi-metal compatibility and is suitable for use on critical aerospace materials and alloys that are used in today's aircraft industry. To be used in both soft and hard water conditions from 100ppm – 400ppm

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	Milky White
Foaming Tendency @ 5% emulsion in 50ppm water	Nil foam after 5 seconds
Specific Gravity at 20°C	1.020 typical
pH @ 5%	9.4 typical
Refractometer Factor	1.1
IP 287 Corrosion Break Point, % Volume:	2.0
Reichert Lubricity Characteristics at 10% dilution;	
Noise Reduction (metres)	20
Load Bearing Capacity (Kg/mm2)	1.855

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