

DURASOL AS-GRS

A next generation full synthetic grinding and cutting fluid designed for high speed grinding of aero blades, vanes and seal segments to Rolls Royce standard RPS 917, RRP 59000.

FEATURES & BENEFITS

- ✓ Chlorine free
- ✓ Sulphur Free
- ✓ Mineral Oil Free
- ✓ Formaldehyde free
- ✓ Low foam
- ✓ Good levels of lubrications
- ✓ Excellent swarf settlement
- ✓ Extremely bio-stable, even under the most arduous of conditions
- ✓ Specifically designed for high pressure cooling systems



CREATED TO TAKE ON THE DIFFICULT

Durasol AS-GRS was specifically designed to manage any high speed grinding processes capable of machining the most difficult nickel based alloys at speeds 5 times greater than standard grinding and applications that require an extreme grinding fluid. **Durasol AS-GRS** was developed to manage the extreme speeds and feeds demanded in twin wheel creep feed grinding applications.

DESIGNED TO GIVE OUTSTANDING PERFORMANCE

Durasol AS-GRS is a fully synthetic water-mix cutting & grinding fluid that forms a true solution when diluted with water. **Durasol AS-GRS** provides superior cooling and flushing characteristics. **Durasol AS-GRS** provides excellent corrosion protection whilst minimising the build-up of 'sticky' residues.

Its unique formulation enables the product to be used on all high speed grinding and machining application. Its synthetic ester packages is designed to gives excellent surface finish without the risk of "blanking" the grinding wheel

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	10-12%
Aluminium	****	Milling	10-12%
Aero aluminium alloys	*****	Turning	10-12%
High alloy/stainless steel	****	Reaming	8-10%
Copper/brass	****	Sawing	5-7%
Cast iron	*****	Drilling	10-12%
Ferrous Materials	****	Grinding	4-6%

TYPICAL PHYSICAL PROPERTIES

Appearance	Yellow liquid
Emulsion Type	True Solution
Foaming Tendency @ 5% emulsion in 50ppm water	Nil foam after 5 seconds
Specific Gravity at 20°C	1.080 typical
pH @ 5%	9.3 typical
Refractometer Factor	2.1
IP 287 Corrosion Break Point, % Volume:	2.5
Reichert Lubricity Characteristics at 10% dilution;	
Noise Reduction (metres)	10
Load Bearing Capacity (Kg/mm ²)	1.95

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