

Technical Data Sheet

Solutions Through Innovative Technology

Name: Val-Cut Dark Cutting Oil Revision Date: 1/14/2024 – R1

ValCool, LLC 1441 Park Ten Blvd. Houston, TX 77084

VAL-CUT DARK CUTTING OIL

DARK CUTTING OIL FOR SEVERE APPLICATIONS

DESCRIPTION

Val-Cut Dark Cutting Oil is a dark, heavy-duty active cutting fluid for the most severe machining operations.

This product contains active sulfur to give exceptional EP performance and film boundary lubrication. Additionally, Val-Cut Dark Cutting Oil contains inactive sulfur to provide additional lubricity and wear protection. High levels of a specially modified triglyceride compound provide excellent machined finish and reduce the need for certain secondary processes. Typical applications include trepanning, gun drilling, broaching, and any high load, low rpm cutting process (tapping, milling, drilling, etc.)

FEATURES & BENEFITS

- Chlorine, phenol and boron free
- Low misting properties
- Extended tool life with increased production rates
- · Excellent chip removal rates
- Exceptional lubrication properties
- Outstanding surface finish
- Non-irritating to operators' skin

METAL COMPATIBILITY

- Steel alloys
- Titanium alloys
- Iron
- Stainless Steel
- Titanium
- Duplex

Iron alloys

Tool Steel

· Hi Temp Alloys

Cast Iron

Steel

Tungsten Carbon

HEALTH & SAFETY

See the most recent SDS which is available directly from ValCOOL, your local representative or authorized distributor. ValCOOL uses only raw materials not listed as carcinogenic by IRAC.

PROPERTIES

Appearance:	Dark Liquid
Diluted Appearance:	N/A
Solubility in Water:	Does not mix
Odor:	Mild Industrial
Specific Gravity:	0.90
Total Sulfur (%):	1.5
Active Sulfur (%):	1.0
Total Ester (%):	5.0
Total Chlorine (%):	0.0
Flash Point (°F):	>390°F
ISO Viscosity @ 40°C:	22

APPLICATION & USAGE

ValCOOL recommends using Val-U-Clean or K-5-P to thoroughly clean machine prior to adding Val-Cut Dark Cutting Oil. Be sure to completely remove all cleaner solution to avoid contamination.

Val-Cut Dark Cutting Oil is a straight cutting oil so mixing with water is not required.

Maintaining the Val-Cut Dark Cutting Oil at its optimum performance is achieved through good fluid filtration practices.

No special precautions are necessary with respect to seals or valves.

Fluid compatibility and machinability should always be tested first; as fluid concentration, metal alloy, and machining operation are variable.



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