Bright-Cut® AH, AXH, NM

Metal Working Fluids

Product Data Sheet

Product description

Bright-Cut metal working fluids are chlorine- free cutting oils that offer benefits not found in conventional cutting oils. The unique synthetic anti-weld components replace the chlorine and reduce the amount of sulfur typically needed for difficult cutting operations. They are light in color, for improved visibility during machining, and low in odor.

Customer benefits

Bright-Cut metal working fluids deliver value through:

- **Excellent anti-weld performance, extended tool life and superior surface finish,** without chlorine and fat, and with reduced amounts of sulfur.
- **Clear, light color** allows operator to better see the machined part during the cutting operation.
- **Minimal odor** - Does not have the strong sulfur smell characteristic of conventional cutting oils, resulting in a more pleasant work environment.
- **Chlorine-free** - Reduces the cost of disposal at the end of the fluid life.
- **Better thermal and oxidation stability** - For longer fluid life, due to Group II base stocks found in NM, AH and AXH grades.
- **Reduced misting and smoking for a safer work environment** - The thermal stability and low volatility of the Group II base stock and the use of an effective mist suppressant reduces worker exposure to cutting oil mist and vapor.
- **Multipurpose performance** - The non-staining cutting oils are formulated to serve as the cutting oil, hydraulic fluid and machine lubricant to eliminate the problem of machine lubricants contaminating the cutting oil.

Product features:

Bright-Cut metal working fluids:

- Provide excellent cooling and lubrication in a wide range of machining operations
- Prevent welding of chip and tool
- Flush chips away from the work area
- Protect the finished work surfaces, tools and machines against rusting and staining
- Minimizes oil mist in high speed machines tools
- Bright-Cut AH and AXH contain active sulfur that will stain copper and brass
- The nonstaining oil, Bright-Cut NM Metalworking Fluid, can be used as a dual or tri-purpose oil in associated splash, hydraulic or spindle lubrication systems of metalworking machines.
- Minimises oil mist in high speed machine tools

Applications

Bright-Cut AH

- Service Classification: Heavy Duty, Active
  Provides excellent performance for a wide range of applications. It is suitable for machining tough alloy steels and stainless steels. It is well adapted for broaching, threading, tapping and other difficult operations requiring a heavy duty oil for tool life and finish.

Bright-Cut AXH

- Service Classification: Extra-Heavy Duty, Active
  Designed for the most difficult machining operations, such as broaching, tapping and threading on soft stringy steels that tend to tear easily, leaving a poor finish. It is recommended for use with alloy steels, stainless steels, tool and die steels. It is preferred over chlorinated cutting oils for heavy duty machining of difficult nonferrous metals (e.g. titanium, nickel) that are not subject to staining, but may become brittle through the use of chlorinated fluids.

Bright-Cut NM

- Service Classification: Medium Duty, Non-staining
  The workhorse tri-purpose cutting oil, suitable for automatic screw machine operations on free-machining to intermediate steels, and intermediate to difficult nonferrous metals.

BRIGHT-CUT®			
Variant	AH	AXH	NM
Product Code	530731	530733	530734
Viscosity, Kinematic			
cSt at 40°C	41.0	140.0	38.9
cSt at 100°C	6.7	15.1	6.5
Flash Point, °C	194	188	210
Pour Point, °C	0	0	-12
Color	L 1.5	L 1.5	L 1.0
Total Sulfur, m %	1.7	2.7	0.5
Active Sulfur, m %	1.6	2.6	—
Synthetic EP, m %	4.5	7	5
Antimist	Yes	Yes	Yes

2004

* Anti-mist is ineffective in low viscosity oils.

ENVIRONMENT, HEALTH and SAFETY

Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.chevronlubricants.com.

Produced by:
Chevron Global Lubricants
– Asia Pacific