

WATER-SOLUBLE OILS

Unbeatable Corrosion Protection and Highest Level of Lubricity in Metalworking Fluids

PB-10

Premium heavy-duty water-soluble oil with chlorinated and sulfurized extreme-pressure additives.

- Hard water stable
- Virtually odorless

Applications:

- Recommended for ferrous and hard-to-machine metals
- Not recommended for brass, bronze, and copper

Ultracut AL

Premium heavy-duty, biostable, water-soluble oil with non-chlorinated extreme-pressure additives and boundary lubricants specifically formulated for aluminum machining.

- Hard water stable
- Resistant to bacteria and fungus

Applications:

- Recommended for ferrous metals, aluminum, and titanium
- Milling, drilling, broaching

Ultracut 255R

Superior heavy-duty, biostable, water-soluble oil with chlorinated and non-chlorinated extreme-pressure additives.

- Hard water stable
- Resistant to bacteria and fungus

Applications:

- Recommended for ferrous metals and hard-to-machine alloys
- Machining, milling, drilling, broaching

Ultracut 250R

Superior moderate-duty, biostable, water-soluble oil with non-chlorinated extreme-pressure additives.

- Hard water stable
- Resistant to bacteria and fungus

Applications:

- Recommended for ferrous metals, aluminum, and titanium
- Machining, milling, drilling, tapping, turning, broaching

WS-5050

Quality heavy-duty water-soluble oil with chlorinated extreme-pressure additives.

- Extends tool life
- #1 selling product

Applications:

- Recommended for ferrous metals and aluminum
- General machining, milling, drilling, broaching

WS-500A

Quality moderate-duty water-soluble oil with non-chlorinated extreme-pressure additives.

Applications:

- Recommended for ferrous metals, aluminum, titanium, and high-nickel alloys
- General machining

WS-11

Economical general-purpose water-soluble oil.

- Offers thin oily-film corrosion protection

Applications:

- Recommended for ferrous metals, aluminum, and titanium

PRODUCT SPECIFICATIONS

	PB-10	Ultracut AL	Ultracut 255R	Ultracut 250R	WS-5050	WS-500A	WS-11
Concentrate Color	Dark brown	Light brown	Light brown	Light brown	Blue	Dark brown	Dark brown
Dilute Color	Milky white	Milky white	Milky white	Milky white	Milky blue	Milky white	Milky white
pH (at 10%)	9.8	9.3	9.5	9.5	9.5	9.2	9.0
Density	8.3 lbs/gal (993 kg/m ³)	8.3 lbs/gal (993 kg/m ³)	8.0 lbs/gal (957 kg/m ³)	7.9 lbs/gal (945 kg/m ³)	8.1 lbs/gal (969 kg/m ³)	7.8 lbs/gal (934 kg/m ³)	7.7 lbs/gal (922 kg/m ³)
EP Additives	Cl & S	Non-Cl	Cl & Non-Cl	Non-Cl	Cl	Non-Cl	
Flash Point	> 200°F (93°C)	220°F (104°C)	220°F (104°C)	220°F (104°C)	230°F (110°C)	320°F (160°C)	320°F (160°C)
Part No.	1 gal (4/cs)			74615	74016		74013
	5 gal	74051	74405	74705	74605	74056	74055
	55 gal	74551	74455	74755	74655	74556	74555

MATERIALS COMPATIBILITY

	PB-10	Ultracut AL	Ultracut 255R	Ultracut 250R	WS-5050	WS-500A	WS-11
Type of Operation	Heavy	Heavy	Heavy	Moderate	Heavy	Moderate	Economical
Carbon Steel	✓	✓	✓	✓	✓	✓	✓
Tool Steel	✓	✓	✓	✓	✓	✓	✓
Stainless Steel	✓	✓	✓	✓	✓	✓	✓
Cast Iron	✓	✓	✓	✓	✓	✓	✓
Aluminum	✓*	✓	✓*	✓	✓	✓	✓
Brass, Bronze, Copper		✓*	✓*	✓*	✓*	✓*	✓*
Titanium	✓*	✓	✓*	✓	✓*	✓	✓

* Limited use