

BlueSpar

Synthetic Machining and Grinding Fluid

PRODUCT DESCRIPTION:

BlueSpar is a medium duty, oil-free, multi-functional synthetic coolant formulated to provide increased corrosion protection on ferrous and non-ferrous metals.

- **Extends Tool Life and Improves Surface Finish**
BlueSpar contains lubricants to provide excellent tool life and surface finish without the use of chlorine or sulfur additives.
- **No Foam**
BlueSpar does not cause any foam build-up even on high speed, high flow rate grinding operations.
- **Multi-Metal Safe**
BlueSpar is formulated with excellent corrosion inhibitors for both ferrous and non-ferrous metals.
- **Rejects Tramp Oil**
BlueSpar rejects water resistant tramp oil for ease of removal by skimming, centrifugation, coalescing, or ultra filtration.
- **Excellent Rancidity Control**
BlueSpar increases sump life and results in a reduction of coolant purchases and waste handling costs.
- **Environmentally Safe**
BlueSpar does not contain nitrites, nitrates, phenols, creosols, harsh alkaline, chlorine, sulfur, monoethanolamine, diethanolamine, or heavy metals.
- **Operator Friendly**
This product is mild and non-irritating to the skin as well as non-flammable.
- **Excellent Filterability**
BlueSpar is easily filtered with diatomaceous earth, positive media, and cyclonic and settling type filtration units.
- **Recycling Highly Recommended**
BlueSpar's recycle ability results in reduced coolant purchases and lower trade waste costs.
- **Extends Wheel Life**
BlueSpar contains selected ingredients to increase wheel life, improve surface finish, and help prevent wheel loading.
- **Excellent Performance in Hard Water Situations**
BlueSpar contains special additives to provide increased sump life in hard water situations. BlueSpar will provide cost savings in coolant and in waste hauling costs.

PRODUCT APPLICATIONS:

For machining applications consult the Recommended Starting Concentration Chart.

PRODUCT DILUTION:

For dilution information, consult the Dilution Chart.

DIRECTIONS FOR USE:

A concentrate designed to be diluted with water, Blue Spar forms a clear solution in a wide range of water temperatures and hardnesses.

1. To insure a uniform solution, mix Blue Spar with water at the appropriate concentrations in a separate container. (Refer to Recommended Starting Concentration Chart.)
2. Agitate solution until thoroughly mixed.
3. Add the mixed coolant to the cleaned sump.
4. Makeup: When adding makeup to the machine, add Blue Spar at 1/2 to 2/3 the concentration desired in the machine. For example, startup of 10:1 requires 20:1 makeup. Always add diluted solution as makeup; never plain water.

NOTE: To prevent any white discoloration when using Blue Spar on galvanized parts, be sure concentration is 20:1 or stronger.

Recommended Starting Concentration (Parts water to parts BlueSpar)							
	Gray Cast Iron	Ductile Iron	Brass Alloy	Mild Steel	Stainless Steel	Aluminum Alloys	Copper Alloys
General Turning	20-1	20-1	20-1	20-1	15 to 20-1	20-1	20-1
Boring	15-1	15--	20-1	20-1	15-1	15-1	15-1
Planing Spot Facing	20-1	20-1	20-1	20-1	15-1	15-1	15-1
General Milling	20-1	20-1	20-1	20-1	15 to 20-1	20-1	20-1
Drilling	10 to 15-1	10-1	20-1	10-1	10-1	10-1	10-1
Tapping Reaming	10-1	10-1	----	10-1	10-1	----	----
Surface Grinding	20-1	20-1	20-1	20-1	20-1	20-1	20-1
Od & Finish Grinding	20-1	20-1	20-1	20-1	20-1	20-1	20-1
Id Grinding	20-1	20-1	20-1	20-1	20-1	20-1	20-1
Cylindrical Grinding	20-1	20-1	20-1	20-1	20-1	20-1	20-1

Formula for determining Total Volume by Gallons

$$\frac{\text{Width} \times \text{Length} \times \text{Height (in inches)}}{231} = \text{Total Sump Capacity in Gallons}$$

BlueSpar Refractometer/Dilution Chart		
Refractive Index	Dilution	Percent
1.0	30.3:1	3.3%
1.5	20.0:1	5.0%
2.0	15.0:1	6.6%
2.5	12.0:1	8.3%
3.0	10.0:1	10.0%
3.5	8.7:1	11.5%
4.0	7.6:1	13.2%
4.5	6.4:1	15.0%
5.0	6.0:1	16.5%
5.5	5.5:1	18.2%
6.0	5.0:1	20.0%
6.5	4.7:1	21.5%
7.0	4.3:1	23.1%
7.5	4.0:1	25.0%

*American Instrument Model 10440 Industrial Fluid Tester

TECHNICAL DATA:

Viscosity – Water thin @ 24°C/75°F

Specific Gravity – 1.04 @ 24°C/75°F

pH (Concentrate) – 9.5 – 10.5

pH (10% solution) – 9.5 – 10.5

Density @ 24°C/75°F -- 8.69 lbs./gal.

Flash Point (COC) -- None

Solubility – Completely soluble in all proportions with hot or cold water.

Storage Stability --

- Shelf @ 24°C/75°F – One year minimum
- Accelerated @ 49°C/120°F – 60 days minimum
- Freeze/Thaw – Product will withstand three freeze thaw cycles.

PACKAGING:

BlueSpar is available in 330-gallon reusable totes; 275-gallon totes; recyclable HDPE (High Density Polyethylene) 55-gallon drums and 5-gallon pails. Label copy is available in both English and Spanish. Secondary labels are also available.

Be sure to read all Directions, Precautionary and First Aid Statements on product labels before use of this or any IPG/Spartan product. Material Safety Data Sheets for all IPG/Spartan products are available from your authorized IPG/Spartan distributor.

GUARANTEE:

Spartan's modern manufacturing and laboratory control insure uniform quality. If dissatisfied with performance of product, any unused portion may be returned for credit within one year of the date of manufacture.