



## Technical Data Sheet (TDS) – Cutting Oil

**Product Name:** Cutting Oil (General Purpose)

**Supplier:** Basekim

**Origin:** UAE / Turkey

### Product Description

Basekim Cutting Oil is a premium-grade metalworking fluid designed to provide **excellent cooling, lubrication, and corrosion protection** during machining operations. Formulated with **high-quality base oils** and **EP additives**, it extends tool life, improves surface finish, and reduces heat generation.

### Typical Applications

- Drilling
- Milling
- Turning
- Grinding
- Broaching
- CNC machining operations

### Technical Specifications

Property	Typical Value	Test Method
Appearance	Amber, clear liquid	Visual
Odor	Mild petroleum / sulfur	Sensory
Density @ 15°C (kg/L)	0.870 – 0.890	ASTM D4052
Viscosity @ 40°C (cSt)	32 – 100	ASTM D445
Flash Point (°C)	≥180	ASTM D92
Pour Point (°C)	-6	ASTM D97
pH (emulsion, 5%)	8.5 – 9.5	ASTM E70
Copper Corrosion (3hr, 100°C)	1a	ASTM D130
Sulfur Content (% wt)	0.5 – 1.5	ASTM D4294



## Performance Benefits

- Superior cooling and lubricity to reduce heat and wear
- Corrosion and rust protection for tools and machines
- Stable emulsion formation in soluble oils
- Excellent surface finish and reduced tool replacement costs
- Low foaming, even at high-speed machining

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## Packaging Options

- **Steel Drums:** 200 Liters (Net weight: ~170 kg)
- **IBC Tanks:** 1000 Liters
- **Bulk Tanker:** Custom volume

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## Storage & Handling

- Store between 5°C and 40°C.
- Keep containers sealed and clean.
- Avoid contamination with water and dust.
- Use proper PPE during transfer and mixing.

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## Recommended Dilution Ratios (For Soluble Cutting Oils)

Application	Dilution Ratio
Heavy Machining	1:10 (oil:water)
General Purpose	1:15
Light Machining	1:20

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## Health and Safety

- Avoid prolonged skin contact.
- Ensure adequate ventilation.
- Refer to the MSDS for detailed safety information.