

## T.C. 1075 Synthetic Lubricant

### DESCRIPTION

T.C. 1075 is a medium-duty, general purpose, water soluble coolant, suitable for use on both ferrous and non-ferrous metals. It is formulated to give easily formed, stable solutions and a long, useful sump life.

The excellent hard water tolerance, non-gumming and non-misting properties of the finished solutions make T.C. 1075 ideally suited for use in central systems and central systems equipped with high efficiency filtration and swarf removal equipment.

The finished emulsions of T.C. 1075 are transparent for better operator visibility and are oil repelling for improved maintenance of product integrity and tram oil removal.

### APPLICATION

The unique formula of T.C. 1075 ensures excellent metal wetting and penetration of the tool/chip interface and is recommended for use wherever hydrodynamic, boundary and chemical lubrication are required, as well as the excellent cooling effects of water.

By incorporating materials which possess the unique physical property of "inverse solubility," the ability to precipitate out of a solution at elevated temperatures to resolubilize at lower temperatures, solutions of T.C. 1075 act as a high film strength, oil-like product at the tool/chip interface. This property reduces friction, improves finish, and increases tool and wheel life while at the same time utilizes the cooling benefits of water to remove excess heat to allow for increased speeds and feeds, greater production, and overall cost effectiveness.

Recommended applications include: turning, boring, facing grooving, grinding, drilling, face milling, end milling, broaching, etc., while using high speed steel or carbide tooling on low, medium or high carbon and low alloy steels, aluminum, copper and brass alloys.

### RECOMMENDED USE DILUTIONS

Metal Removal	
Turning, boring, grooving	30-20 parts water to 1 part T.C. 1075
Drilling	20-15 parts water to 1 part T.C. 1075
Face and end milling	20-10 parts water to 1 part T.C. 1075
General grinding	30-50 parts water to 1 part T.C. 1075
Broaching and tapping	10- 5 parts water to 1 part T.C. 1075

These conditions may be varied as required to provide optimum results.