

## ORASTAR 401

### SEMI-SYNTHETIC, METALWORKING FLUID CONCENTRATE

#### APPLICATIONS

**ORASTAR 401** is designed to be used in machines and operations where long fluid life is needed, such as in large individual machine or central system reservoirs. It is recommended for moderate-duty machining and grinding of ferrous metals, and some nonferrous metals.

**Metals:** Cast Iron, Nodular Iron, Carbon Steels, High Speed Steel, High Alloy Steels, Stainless Steels, Aluminium

**Duty Range:** For light to moderate-duty operations

#### FEATURES & BENEFITS

**ORASTAR 401** is a clear, water soluble, semi-synthetic product.

**Advantages:** Exceptional rancidity control - Effective lubrication and cooling - Good settling properties - No nitrite

**Effective Lubrication and Cooling:**

A combination of chemical lubricants and wetting agents provide good machining and grinding properties - Keeps parts and tools cool - Extends tool life - Allows high speeds and feeds that increase production

**Stable:**

Can be used in individual machines as well as central system applications

**Good Settling Properties:**

Efficiently settles chips and grit - Produces a good cake on positive filters which removes recirculating fines and also lowers media usage - Parts and machines stay clean

**Excellent Corrosion Control:**

Organic and inorganic corrosion inhibitors protect machines and parts from rust

**Environmentally Friendly:**

Is easy to maintain and control - It is waste treatable - It can also be recycled for reuse

#### RECOMMENDED STARTING DILUTIONS

##### FOR INDUSTRIAL USE ONLY

*Use between 5.0% (1:20) and 10.0% (1:10) for machining and grinding ferrous and nonferrous metals.*

**ORASTAR 401** is to be mixed with water for use (add concentrate to water). Add no other substances to the concentrate or mix unless approved by Victoria Lub Pty Ltd Technical Services. Not recommended for use with magnesium or alloyed magnesium.

## TECHNICAL BULLETIN

Revision Date: 11/04/2019

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**VictoriaLub**  
HIGH TECH LUBRICANTS AND ENGINEERING PRODUCTS

### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Appearance and odour:</b>	Clear, yellow/chemical
<b>Colours available:</b>	Undyed, pink, blue
<b>Solubility in water:</b>	100% Miscible
<b>Weight, lb/gal, 60°F (15.6°C):</b>	8.83
<b>Specific gravity, (H2O = 1):</b>	1.058
<b>Boiling point, °F (°C):</b>	210 (99)
<b>Flash point, COC, °F (°C):</b>	None, self extinguishing
<b>Fire point, COC, °F (°C):</b>	NA
<b>Extinguishing media:</b>	NA
<b>Unusual fire &amp; explosion hazards:</b>	None
<b>Freezing point (or pour point), °F, (°C):</b>	32 (0)
If frozen product separates. Thaw completely and stir thoroughly before using.	
<b>pH, concentrate:</b>	10.2
<b>pH, 5.0% mix, typical operating conditions:</b>	9.0
<b>Total chlorine/chloride, wt%, calculated:</b>	0.00/< 50 ppm
<b>Total sulfur, wt%, calculated:</b>	0.01
<b>Silicones:</b>	None

### PACKAGING

Available in 20 Litre Containers and 200 Litre Drums

### REFRACTOMETER FACTOR = 3.0

Multiply the scale reading obtained on your ORAPI Metalworking Fluid or other acceptable refractometer by the **Refractometer Factor** to obtain the mix concentration in percent.

**NOTE: Calibrate the refractometer so that it reads 0.0 with water, before testing the sample mix. Remove gross contaminants from the sample mix, before testing.**

