

TECHNICAL INFORMATION©₁₉₉₂

ProChemCo, LLC/PrOlix®

XTRA-T™ LUBE

Premium Quality

Bio-Tech

Lubricant

Product description

Xtra-T™ Lube is a premium quality lubricant designed to provide excellent lubrication of today's Hi-Tech precision equipment and at the same time far exceed the requirement of yesterday's technology! **Xtra-T™** is made from highly refined bases that have been carefully selected to provide superior viscosity/temperature characteristics, low foaming tendencies and good water separation properties. In addition, they contain proven additives to protect equipment against rusting and to resist oxidation for long service life. At the same time, it is safe enough to be used in the medical and dental fields.

General applications

The high quality of **Xtra-T™** makes it suitable for a wide range of lubrication applications. These include mainly for the tool of our sport, general-purpose home and industrial needs, non-antiwear applications, and extreme temperature demands.

Xtra-T™ was tested and far exceeded the Standards for machine tool lubrication established by the American Society of Lubrication Engineers (ASLE), and the American Gear Manufacturers Association (AGMA), including a special classification for rust and oxidation inhibited lubricants for applications as non-E.P. gear lubrication requirements.

Xtra-T™ has a long, successful record of providing dependable lubrication with trouble-free performance. The user should select **Xtra-T™** by **PrOlix®**, and apply in accordance with the recommendation of the manufacturer, or the repair tech.

Significant features

Xtra-T™ has achieved a long record of reliable performance because of three significant features:

Superior oxidation stability:

A laboratory test method widely used for evaluating the oxidation stability is ASTM D 943, (TOST). In this procedure, pure oxygen is bubbled through a mixture of lubricant and water in this presence of copper and iron wire catalysts at 95°C. The TOST life is reported as the time in hours for the lubricant to reach acidity (TAN-C) of 2.0. A modification of the TOST used by the Navy (MIL TOST) is terminated at 1000 hours, and lubrication condition is evaluated, especially sludge content.

Xtra-T™ resisted oxidation so well that it required considerably longer than 2000 hours under the severe conditions of the TOST to reach a TAN-C of 2.0. In the MIL TOST, sludging is held to an

extremely low level, no more than 20mg. This high resistance to deterioration means long service life. It minimizes deposits, which could cause malfunction and reduced efficiency.

Non-corrosivity to metals:

Corrosivity toward copper and copper alloys is evaluated by the ASTM D 130 test. In this, **Xtra-T™** got a rating of **“1”**, representing a practically unchanged copper strip.

The ASTM D 665 Rust Test is an industry laboratory procedure designed to measure the rust preventing characteristics while in the presence of water. In this test **Xtra-T™** as a lubricant not only prevented corrosion of a steel specimen in the presence of distilled water, but also in the presence of synthetic seawater, which is intended to simulate the more severe rusting conditions existing in marine applications.

Contamination with water is a frequent occurrence in some applications. This water in the presence of air may cause rust in such areas that are almost impossible to reach and maintain especially in precision mechanisms. **Xtra-T™** Lubricant effectively inhibits corrosion of these critical parts, thus contributing to increased life and system reliability.

Fast separation of water:

The rapid separation of water from any lubricant is a paramount importance to minimize any opportunity for rusting and to prevent possible cavitation in critical areas such as precision machined and modified surfaces.

An accepted laboratory test to measure water separation is the ASTM D 1401 Emulsion Test, which measures the time required for the lubricant and water to separate after being mixed under prescribed conditions at 130°F (54°C). **Xtra-T™**, because of its careful formulation, accomplished complete separation in less than 10 minutes. By this test being less than 30 minutes, the demulsibility is considered **“excellent”!**

ASTM TEST METHOD & RESULTS

Gravity, °API	D 1298	29
Color	D 1500	<3
Pour point, °F	D 97	0
Flash point, C.O.C., °F	D 92	480
Viscosity, cSt at 40°C	D 445	101.4
Viscosity, cSt at 100°C	D 445	10.9
Viscosity index	D 2270	90
Neutralization No., TAN-C	D 974	0.1
Cu corrosion, 3 hr at 212°F	D130	1
Rust Test	D 665B	Pass
Interfacial tension, 77°F, dynes/cm	D 971	20
Emulsion test, minutes	D 1401	10
Stability test, hours	D 943	2000+
Stability test, MIL TOST sludge, mg		20
Rotating Bomb oxidation test, minutes		350