# TECHNICAL DATA

# Low Temp Semi-Syn

AW Hydraulic Oil No. 307

ISO: 15

## **DESCRIPTION:**

**Low Temperature Semi-Syn Hydraulic Oil** is a premium quality, highly oxidation stable, anti-wear lubricant, blended from extremely high VI group III base oil, synthetic base oil and specially selected additives. This lubricant can be used in a wide variety of hydraulic applications operating in unusually cold conditions where an ISO 15 anti-wear hydraulic oil is specified.

#### PERFORMANCE CHARACTERISTICS:

## • Seal compatibility

Compatible with all normal hydraulic component seal material. Will not dry out seals and O-rings, as with other low temp. hydraulic oils.

## • Oxidation resistant (6,000 hours in the ASTM-D943 Oxidation Test)

Oxidation inhibitors and premium quality base oils combine to form a product with outstanding resistance to oxidation and provide the maximum protection against varnish formation at both high and low temperatures. This feature will extend drain intervals.

### • Provides excellent anti-wear protection

Special anti-wear, extreme pressure and friction reducing additives provide the highest level of protection against wear and scuffing.

## • Friction reduction

Exclusive friction reducing additives provide reduced operating temperature and reduced horsepower requirements in comparison to other low temperature hydraulic oils.

## • Superior rust protection

Inhibitors protect both steel and yellow metal surfaces against rust and corrosion.

#### • Demulsibility

Designed to separate rapidly from water.

#### • High foam resistance

Foam inhibitors provide a high level of foam resistance to prevent pump starvation and damage.

#### • High viscosity index

To insure viscosity stability at both standby and operating temperatures.

• Superior filterability

#### **SERVICE APPLICATIONS:**

**Low Temp Semi-Syn** AW Hydraulic Oil is intended for use in mobile hydraulic systems operating in deep freezers and in mobile equipment operating in arctic conditions, such as:

Road GradersBulldozersLift trucksBackhoesLoadersCherry PickersDump TrucksCranesHaul Trucks

## **TYPICAL SPECIFICATIONS:**

ISO Grade	Test Method	15
Viscosity @ 40° C, cSt:		16.7
Viscosity @ 100° C, cSt:		3.87
Viscosity Index:		137
Pour Point, °F:		-55
Color, Saybolt:		1.0
API Gravity:		34.2
Oxidation Stability, TOST, hr <sup>1</sup>	ASTM D-943	6,000+
Four Ball Wear Test	ASTM 2266	
30 KG, 1 hour @ 167° F		Scar 0.50
Copper Corrosion,	ASTM D-130	1A
Foam Test,	ASTM D-892	
Available foam after 10 min.		Nil
Rust Test	ASTM D-665	A/B
Distilled Water		Pass-clean
Synthetic Sea Water		Pass-clean
Demulsibility Test	ASTM D-1401	Pass

Values shown here are typical, and may vary.