



## TECHNICAL DATA SHEET

## **CINNFLUID AW+1 Synthetic Fluids**

Overview: Interlube CINNFLUID AW+1 Synthetic Fluids are multi-purpose synthetic food grade lubricants specially formulated with very high levels of antioxidants to meet the most demanding requirements of the food processing and pharmaceutical industries. They are suitable for a wide range of general-purpose applications including today's modern high pressure, high speed hydraulic systems. They are formulated with a unique combination of antiwear agents, mild EP agents, rust inhibitors, and oxidation inhibitors which pass the tough Vickers 2000 psi pump wear test while still maintaining their food grade rating. The oxidation stability and anti-wear performance of these synthetic food grade lubricants is superior to most non-food grade lubricants on the market today. These synthetic lubricants are used in many applications including those calling for non-detergent oils, bearing lubricants, non-EP type gear lubricants, electric motor lubricants, spindle lubricants, chain lubricants, and circulating system lubricants.

CINNFLUID AW+1 Synthetic Fluids are available in 4 ISO grades from an ISO 32 to ISO 150. They are all NSF H1 and are suitable for food machinery applications where there is possibility of incidental contact with food or its packaging materials.

Operational Benefits: These products offer these competitive advantages to enhance your reliability:

• Reduced wear - longer equipment life • USDA/ NSF H-1 (approved for incidental food contact) • Superior antioxidant and anti-wear properties • Very low volatility – reduced oil make-up • Lower downtime/ maintenance - more production time • High Viscosity Index • Completely shear stable • Excellent AW performance • Very low Pour Point • Increased performance – lower operating costs • Wide operating temperature range • Compatible with systems designed for mineral oils

Application: These products can be used in the following (though not exhaustive) list of applications:

• Low-temperature applications • Hydraulic systems • Circulation systems • Bearing lubrication (circulation / static) • Chains • High-speed gearboxes • Spindles • Slicers

Typical Industries: These products are commonly used (but not exclusively) in the following industries:

• Food production • Pharmaceutical production • Packaging • Pet food production • Meat processing • Dairy • Snack and candy production

## **Technical Properties**

Property	Method	CINNFLUID 155 AW+1	CINNFLUID 235 AW+1	CINNFLUID 310 AW+1	CINNFLUID 750 AW+1
Appearance	Visual	Clear Liquid	Clear Liquid	Clear Liquid	Clear Liquid
Color	ASTM D- 1800	<0.5	<0.5	<0.5	<0.5
Viscosity ISO Grade cSt @ 40°C cSt @ 100°C SUS @ 100°F SUS @ 210°F SAE Grade (approx.)	ASTM D- 445	32 32 9.2 155 46 10W	46 50 10 235 52 20	68 66 10 310 60 20	150 161 19 750 96 40
Viscosity Index	ASTM D- 2270	>150	>150	>150	>150
Pour Point (°F)	ASTM D- 97	<-40	<-35	<-33	<-27
Flash Point (°F)	ASTM D- 92	>460	>490	>500	>500
API Gravity	ASTM D- 5002	39.5	38.2	38.1	35.6
Specific Gravity	ASTM D- 1298	0.828	0.834	0.834	0.847
Anti-Wear Testing	Vickers 2000	PASS	PASS	PASS	PASS
Four Ball Wear (mm)	ASTM D- 2783	<0.4	<0.4	<0.4	<0.4
FZG Load (Failure Stage)	DIN 51354 / ASTM D- 5182	12	12+	12+	12+
Rust Test	ASTM D- 665	PASS	PASS	PASS	PASS
Copper Corrosion	ASTM D	1a	1a	1a	1a

 $\label{thm:continuous} The \ values \ shown \ are \ typical \ of \ current \ production. \ \ All \ of \ them \ may \ vary \ within \ tolerable \ ranges.$ 

**CINNFLUID AW+1 Fluids** are USDA H-1 type lubricants for use where there could be incidental contact with food products. They meets FDA requirements for lubricants with incidental food contact as noted in 21 CFR 178.3570.

