

# TECAFORM™ AH ID

## (Metal Detectable Acetal)

Until now, when a food processor or other manufacturer needed a means of detecting the presence of foreign substances in the product, they had no choice but to use highly visible

colored materials for their plastic parts. TECAFORM AH ID is the first commercially available thermoplastic that can be detected by the standard metal detection equipment

that is typically used in quality inspection. This advancement in technology will reduce the risk of product contamination, and help minimize the possibility of significant financial loss.

- **Detectable by standard metal detection equipment**
- **Excellent machinability**
- **Manufactured from resin that is FDA compliant**
- **Good combination of mechanical properties**
- **Resistance to washdown chemicals**  
TECAFORM™ is resistant to aqueous solutions with pH values ranging from 4 to 14.
- **Good wear and abrasion properties**
- **Low moisture absorption**
- **Good dimensional stability**
- **Good property retention at elevated temperatures**
- **Grey in color**

*TECAFORM™ AH ID can be used in a variety of food industry applications requiring good strength and toughness, dimensional stability, wear resistance and the ability to operate in a wet environment with little moisture absorption. Fillers, conveyors and forming equipment are among the pieces of food machinery that utilize TECAFORM™'s combination of properties. Typical applications are gears, wear strips, bushings, pump parts, form dies and rollers.*

# TYPICAL PROPERTY VALUES

	PROPERTIES	ASTM Test Method	Units	TECAFORM™ AH ID
<b>PHYSICAL</b>	Density	D792	lbs/in <sup>3</sup>	0.0507
	Specific Gravity	D792	g/cc	1.48
	Water Absorption, @24 hours, 73°F	D570	%	0.22
	@Saturation, 73°F	D570	%	0.65
<b>MECHANICAL</b>	Tensile Strength @ Yield, 73°F	D638	psi	9,280
	Tensile Modulus	D639	psi	406,000
	Elongation @ Break, 73°F	D638	%	25
	Flexural Strength, 73°F	D790	psi	11,000
	Flexural Modulus, 73°F	D790	psi	360,000
	Compressive Strength	D695	psi	4,500
	Izod Impact Strength, 73°F	D256	ft-lbs/in	1.0
	Rockwell Hardness, 73°F	D785	M Scale	86
	Shore Hardness	-	D Scale	-
	Wear Factor Against Steel, 40 psi, 50 fpm s	D3702	$\frac{\text{in}^3}{\text{hr}} \times \frac{1}{\text{PV}}$	$65 \times 10^{-10}$
	Static Coefficient of Friction	D3702	-	-
	Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702	-	0.21
	<b>THERMAL</b>	Heat Deflection Temperature @ 66 psi	D648	°F
@ 264 psi		D648	°F	230
Coefficient of Linear Thermal Expansion		D696	in/in/°F	$6.1 \times 10^{-5}$
Maximum Servicing Temperature, Intermittent		-	°F	285
Long Term		UL746B	°F	212
Specific Heat		-	BTU/lb-°F	-
Thermal Conductivity		-	-	-
Vicat Softening Point		-	°F	-
Melting Point		D2133	°F	329
Flammability	UL94		HB	
<b>ELECTRICAL</b>	Surface Resistivity	D257	ohm/square	$1.0 \times 10^{12}$
	Volume Resistivity	D257	ohm-cm	-
	Dielectric Strength	D149	V/mil	-
	Dielectric Constant, @ 60 Hz, 73°F, 50% RH	D150	-	-
	@ 1 MHz	D150	-	-
	@ 20 GHz	D150	-	-
	@ 30 GHz	D150	-	-
	Dissipation Factor, @ 60 HZ, 73°F	D150	-	-

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## MATERIAL AVAILABILITY

**Rods:** Call for availability.

**Plates:** Call for availability

## Primary Specification (Resin) (Typical)

**Grey** ASTM-D-6778 POM0211

## Shapes Specification (Typical)

**Grey** ASTM-D-6100 S-POM0211

*Profiles, tubes, and special sizes are custom-produced on request.*



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