



Dynamar™

Bonding Agent/Processing Aid

HX-878

Description	A reaction product of tetraethylene pentamine with acrylonitrile and glycidol—sometimes referred to as “TEPANOL.”
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Suggested Use	<p>When added to a solid rocket propellant formulation containing ammonium perchlorate at a concentration of 0.05% to 0.5% by weight, Dynamar™ HX-878 may reduce the end of mix viscosity, as well as improve the mechanical properties of the cured propellant.</p> <p>Since HX-878 reacts with the surface of ammonium perchlorate to liberate ammonia, it should be added early in the mix cycle. The ammonia must be removed by vacuum, or preferably by sparging before the curatives are added.</p>
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Typical Properties	Appearance	Amber liquid
	Viscosity, cps	50,000
Not for specification purposes	Density, g/cc	1.1
	Flash Point (Penske-Martens Closed Cup)	>110°C (>230°F)
All measurements at 25°C, 1 atm unless noted	Total Amine Content EQ/100g	1.0
	Hydroxyl Content EQ/100g.....	0.5

Safety and
Toxicology

Material Safety Data Sheets are available from 3M Performance Materials Division.

Storage

To minimize ammonia evolution and viscosity increase, we recommend storage at -18°C (0°F) and protection from moisture.

Shelf Life

Shelf life is two years with proper storage.

Packaging

One-pound and forty-pound units.

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