



HI-SHEAR CORPORATION
2600 SkyPark Drive
Torrance, California 90509

Specification No.: 397

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Re-written By: *Phat Luu* Phat Luu

Approval: Vice President, Eng. & Q.A. *Dominic Ruiz* Dominic Ruiz

Director, Engineering *Edward E. Beeles* Edward E. Beeles

Manager, Engineering *Jeffrey Hayes* Jeffrey Hayes

Director, Quality Assurance *Sharon Schell* Sharon Schell

Metallurgy *Joan Preda* Joan Preda

**ALUMINUM PIGMENTED HI-KOTE® COATING
FOR
FASTENER SYSTEMS, SELF-LUBRICATING**

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REVISIONS

<u>Revision</u>	<u>Date</u>	<u>Change</u>
A	10-2008	Title: Added word "pigmented Hi-Kote®" and delete word "Titanium". 1.0: Added word "pigmented Hi-Kote". 2.0: HS294 -- Added word "pigmented Hi-Kote" and delete word "Titanium".



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1.0 SCOPE

This specification covers the requirements of self-lubricating aluminum coating for fastening systems. Aluminum pigmented Hi-kote coatings produced and applied per this specification must also meet the requirements of HS294, excepts as noted.

2.0 APPLICABLE DOCUMENTS

HS294	Aluminum pigmented Hi-kote coating for Fastener Systems
NAS4006	Aluminum coating
BMS10-85	Aluminum Pigmented Coating for Fasteners
ASTM E595	Standard test method for total mass loss and collected volatile condensable materials from outgassing in a vacuum environment

3.0 REQUIREMENTS

3.1 Lot Acceptance Requirements

3.1.1 Appearance

The coating shall be smooth with a uniform brownish gold color, and shall be free of pin holes, blisters, nodules, or other imperfections harmful to the function of the coating. A matte finish is acceptable with this coating.

3.2 Qualification Requirements

3.2.1 Push-in Test

3.2.1.1 Five samples of ¼" diameter HST10, 11, 12, or 13 fasteners shall be coated with the aluminum coating per the requirements of this specification and installed in holes in 0.500" thick 2024-T4 aluminum plate. There shall be a 0.003" to 0.005" interference between the fastener and hole. The edges of the holes shall be chamfered to a diameter up to 0.055" larger than the hole. A radius up to 0.035" may be applied to the chamfer edges. The average of the five installations shall have an installation force of 1600 lbs. or less, without a single installation force higher than 2000 lbs.



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3.2.2 Outgas Test

3.2.2.1 Perform outgas tests as defined in ASTM E595. The results must meet the requirements of Table 1.

Table 1. Requirements for ASTM E595 Outgas Test

TEST	LIMITS
Total Mass Loss (TML)	1.0% Maximum
Collected volatile Condensable Material (CVCM)	.10% Maximum
Water Vapor Recovered (WVR)	Information Only