

FILIFORM CORROSION TEST**Application**

This procedure is used to evaluate comparatively the filiform corrosion resistance of fully or partially painted, clear coated aluminum wheel surfaces.

Apparatus Required**Controlled Atmosphere Chamber**

For construction of the controlled atmosphere chamber refer to Figure 1.

Large round jar (a) or desiccator (b):

- (a) Jar, cylindrical, plain, Pyrex brand, O.D. 305 mm, height 305 mm.
- (b) Desiccator, body only, Pyrex brand, 250 mm size.

Polycarbonate Cover

6 mm thick to fit jar or desiccator

Small Gearmotor

Model CA, 150 to 400 rpm, or equivalent.

Source: Hurst Mfg. Corp.
P. O. Box 326
Princeton, Indiana 47670-0326
Tel: (812) 385-2564
Fax: (812) 386-7504

Note: Gearmotor should be reversible. During operation of the test, more uniform results are obtained if the stirring rotor direction is changed about every five minutes. This can be done automatically with an external timer/single pole-double throw switch arrangement such as:

Source: Model CMS
Industrial Timer Corporation
U.S. Highway 287
Parsippany, NJ 07054

Polycarbonate Sheet

Thickness: 1.6 mm or less

Date	Action	Revisions
2001 11 14	Revised	Rev Apparatus and Procedure M. Kelly, K. Bruley
2001 03 20	Revised	Editorial – no technical change A. Cockman
1999 01 26		

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Polycarbonate Rod

50 mm length, 18 mm diameter, for rotor

Wide Mouth Dish

For HCl; 100 mm watch glass

Scriber

Carbide Tip, Model 90C

Sources: Aircraft Specialties, Inc. (#90C)
 415-T Howard St.
 P. O. Box 98
 Lapeer, Michigan 48446
 Tel: (810) 664-2981
 Fax: (810) 664-2730

GTS (#CM88)
12015 Telegraph
Detroit, Michigan 48239
Tel: (313) 531-7666

Film Thickness Gauge

Minitector or equivalent
Model A355--T/T35511952

Source: Elcometer, Inc.
 1893 Rochester Industrial Dr.
 Rochester Hills, Michigan 48305-3342
 Tel: (800) 650-0072
 Fax: (248) 650-0501

Weather-Ometer

Controlled Irradiance Water-cooled Xenon Arc Apparatus per SAE J1960.

Source: Atlas Electric Devices Company
 4114 North Ravenswood Avenue
 Chicago, Illinois 60613
 Tel: (773) 327-4520