



**ASSOCIATION OF AMERICAN
 RAILROADS**

Date: July 16, 2019

Subject: AAR Specification M-947, Adhesive-Backed Films for Marking Cars – Performance Based Requirements. Approved Products

The following products have been approved by the AAR Equipment Engineering Committee under AAR Specification M-947:

Manufacturer: Website	M-947 Approved Products
3M: www.3m.com	3M™ Controltac™ Graphic Film Series 180
	3M™ Scotchcal™ Graphic Film Series 3690
	3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7725
	3M™ Scotchcal™ Graphic Film Series 8000
	3M™ Scotchlite™ Reflective Graphic Film Series 680
	3M™ Scotchlite™ Removable Reflective Graphic Film with Comply™ Adhesive Series 680CR
	3M™ Scotchcal™ Graphic Film Series 3650
	3M™ Scotchlite™ Reflective Graphic Film Series 5100
	3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7125
	3M™ Diamond Grade™ Rail Car Reflectorization Series 983
	3M™ Diamond Grade™ Rail Car Reflectorization Series 973
Arlon, Inc.: www.arlon.com	Premium Cast Films Series 2100
Aura Optical Systems Management, L.P: www.auraopticalsystems.com	AURA(R) 149 Railcar Conspicuity Tape Retroreflective
	AURA(R) 149-TL Railcar Conspicuity Tape Retroreflective
Avery Dennison: www.averydennison.com	Avery Dennison SC900 Series
	Avery Dennison HV1200 Reflective Series
	Avery Dennison V9700-RR Series
Mactac: www.mactac.com	MACal 9800 CT series
ORAFOL: www.orafolamericas.com	ORACAL® Series 951 Premium Cast
	ORACAL® Series 751 High Performance Cast
	ORALITE® Series 5600 Fleet Engineering Grade Reflective
	ORALITE® R99, R82 Rail Car
Ritrama Inc.: www.ritrama-us.com	ORALITE® R59 Rail Conspicuity Sheeting
	Ritrama 670, Rexcal 4000 Series

Please contact suppliers to determine if the products listed here meet FRA Rule CFR 49 Part 224, *Reflectorization of Rail Freight Rolling Stock*.