

Automotive Technical Datasheet

3M[™] Adhesion Promoter

4298UV

Description

3M[™] Adhesion Promoter 4298UV is intended to be used on low surface energy materials which would include PP and PP/EPDM blends (TPO). A fluorescent dye has been added so that the adhesion promoter coverage can be verified. Since formulation and surface energies vary for these substrate materials, each application should be verified through testing. 4298UV is specifically formulated to be used with 3M Acrylic Foam Tapes for Automotive applications.

General Properties

3M™ Adhesion Promoter 4298UV is found to be suitable for many substrates like TPU, EPDM, PE, PET, ABS or EVA. It is not suitable in combination with PVC.

Components

Cyclohexane, xylene, ethyl alcohol, eythylbenzene, ethyl acetate, acrylic polymer, chloronated polyolefins, isopropyl alcohol. Contains less than 0.5% of the following:

bisphenol a-epichlorohydrin copolymer, methyl alcohol, chlorobenzene

Properties	
Colour	straw
Density	0.82 g/cm³
Viscosity	< 25 cp

Typical Adhesion Values

(in combination with Acrylic Foam Tapes GT6008 and 5580)

Test	Таре	Result
90°Peel Adhesion on PP EPDM 20 Minutes RT	GT6008 NLS	30 N/cm (Cohesion Failure)
Test Speed = 300 mm/min	5580 NLS	38 N/cm (Pop Off PP EPDM)
90°Peel Adhesion on PP EPDM 3 Days RT	GT6008 NLS	33 N/cm (Cohesion Failure)
Test Speed = 300 mm/min	5580 NLS	41 N/cm (Cohesion Failure)
90°Peel Adhesion on PP EPDM 3 days 90°C	GT6008 NLS	23 N/cm (Cohesion Failure)
+ 1 h RT Test Speed = 300 mm/min	5580 NLS	24 N/cm (Pop Off PP EPDM)
T-Block Test on PP EPDM Stored for 240 h in 80°C*, tested in 80°C Area 25,4mm x 12,7 mm Test Speed = 50 mm/min	GT6008 NLS	46 N/cm² (Cohesion Failure)

^{*} On other substrates containing mineral oils or plasticizer the temperature performance can be decreased.



Handling instructions 3M™ Adhesion Promoter 4298UV

Surface Preparation

The surface must be clean which means dry, free of dust, oil, mould release agent and other impurities. If necessary, we recommend cleaning the surface with material compatible solvents and/or to abrade slightly with abrasive paper (for extreme cases).

Clean up

Contaminations of 4298UV can be cleaned up with MEK or Acetone.

Application

Before using the primer, it must be shaken well and applied uniformly on the surface. Good results will be achieved with a wet coating thickness up to $50 \mu m$. The drying time is dependent on the temperature, humidity and circulation of air as well as on the porosity of the surfaces. When the solvents are completely evaporated the coating is dry (after 30-90 seconds), bonding can be carried out. The bonding should occur within 1 hour after applying the adhesion promoter.

The recommended processing temperature for adhesion promoter and material is between 15°C and 25°C.

Shelf Life

One year from date of receipt by customer when stored in the original container at + 4°C to + 38°C. Storage at lower temperatures for short periods will not affect product performance if the adhesion promoter is warmed up to room temperature before application.

Safety Instructions

See material safety data sheet IMDS link: http://www.mdsystem.de

Important notice to purchaser

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness there of is not guaranteed. Please ensure before using our product that it is suitable for your intended use. All questions of liability relating to this product are governed by the Terms of Sale subject, where applicable, to the prevailing law.

