

PAINTS COMPATIBILITY IN THE LIQUID STATE

Page 1/3

NO USE RESTRICTION*This is a translation, the French original shall be used in all cases of litigation**Date of translation : 27/10/2003***FOREWORD**

This document is in technical conformity with RENAULT test method No. 1321.

It must not be modified without prior consultation with RENAULT.

It is in conformity with the agreement reached between the Normalisation Services of PEUGEOT S.A. and RENAULT in APRIL 1990.

1. OBJECT AND FIELD OF APPLICATION

The object of this test method is to describe a method of operation for determining the compatibility of various paints in the liquid state.

2. PRINCIPLE

The method consists of mixing in various proportions two products (the "initial" product and the "cutting" product) and of assessing the various defects created.

3. EQUIPMENT**3.1. SPATULA****3.2. ADJUSTABLE VENTILATED OVEN**

from 20°C to 250°C.

3.3. THREE GRADUATED CYLINDERS

of 500 ml.

3.4. CONTAINERS

of 1 litre.

3.5. GUN SPRAYING EQUIPMENT

defined in test method D59 1170.

3.6. APPLICATION EQUIPMENT

defined in test method D59 1509 for electro-depositable products.

3.7. GRADUATED BEAKER

of 5 litres.

4. METHOD OF OPERATION

4.1. PRODUCTS APPLIED BY GUN SPRAYING OR DIPPING

- Dilute the products to the viscosity for use with the suitable thinner (s) according to test method D55 1016.
- Stir and homogenise the products before taking the test sample by means of a mixer or spatula (3.1.).
- Introduce successively the products into each cylinder (3.3.) in the following proportions :
 - cylinder No. 1 : 10% of the initial product + 90% of the cutting product,
 - cylinder No. 2 : 50% of the initial product + 50% of the cutting product,
 - cylinder No. 3 : 90% of the initial product + 10% of the cutting product.
- Pour the content of each cylinder into a container (3.4.) and homogenise with the spatula (3.1.).
- Close the containers and leave the products to stand for 24 hours in order to remove air bubbles.
- Apply each mixture under production conditions of use (gun spray, dip).
- Stove according to the conditions specified in the documents.

4.2. PRODUCTS APPLIED BY ELECTRO-DEPOSITION

- Prepare two baths from the “initial” product and the “cutting” product following the instructions of the supplier (s).
- Stir and leave the products for a suitable homogenisation before taking the test sample.
- Proceed with the 5 following mixtures in volume in cataphoretic tanks (3.6.)
 - A : 100% of the initial product.
 - B : 75% of the initial product + 25% of the cutting product.
 - C : 50% of the initial product + 50% of the cutting product.
 - D : 25 % of the initial product + 75% of the cutting product.
 - E : 100% of the cutting product.
- Stir and leave to homogenise for 4 hours.
- Use the test specimens prepared according to the documents in order to produce deposits and stovings in accordance with test method D59 1509 following the supplier's instructions.

5. EXPRESSION OF RESULTS

5.1. EXAMINATION OF MIXTURES

Record the presence of gel, precipitation, ... or any change to the mixture.

5.2. EXAMINATION OF TEST SPECIMENS

Record any appearance defects such as streaking, cracks, curtains, sags, waviness, marbling, speckling, trails, pitting,...

6. TEST REPORT

As well as the results obtained, the test report must indicate :

- the reference to this method,
- the test conditions,
- the operating details not specified in the test method as well as any possible incidents which may have affected the results.

7. RECORDS AND REFERENCE DOCUMENTS

7.1. RECORDS

7.1.1. CREATION

- OR : 01/03/1980 – CREATION OF THE NORME.

7.1.2. SUBJECT OF THE MODIFICATION

- A : 01/05/1991 – COMPLETE REWRITE OF THE NORME.
- B : 10/07/1997 - INTRODUCED INTO IDEM (*French only*).

7.2. REFERENCE DOCUMENTS

7.2.1. PSA DOCUMENTS

7.2.1.1 Normes

D55 1016, D59 1170, D59 1509.

7.2.1.2. Others

7.2.2. EXTERNAL DOCUMENTS

7.3. EQUIVALENT TO : REN1321

7.4. CONFORMS TO :

7.5. KEY-WORDS