

## Test report

**Test report relating to a sealant for insulating glass products, TGA and IR determination, concerning the product marked as: MF882, manufactured by: Zhengzhou Zhongyuan Silande High Technology Co., LTD.**

Report number	89213213-01
Date	13 March 2018
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Client	ZHENGZHOU ZHONGYUAN APPLIED TECHNOLOGY R&D CO.,LTD No.100, Dongqing West St Hi-tech Industrial Development Zone Zhengzhou, Henan, 450001 P.R. China
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# 1 Introduction

## 1.1 Purpose

The tests have been performed in order to determine the properties of a sealant .

## 1.2 Description of the test specimen

### General

Name of the manufacturer	Zhengzhou Zhongyuan Silande High Technology Co., LTD.
Address of the manufacturer	No.100, Dongqing West St Zhengzhou, Henan, 450001 P.R. China
Production plant of the samples	same as above
The product was marked as/ trade name	MF882

### Specific

Sealant material	MF882
Type	2 component silicone Sealant for Insulating Glass
Batch number (s)	2018-02-15-11
Mixing ratio	12: by weight
Manufacturing date sample	2018-02-25
Colour	Black
Other	-/-

## 1.3 Sampling procedure

TÜV Rheinland B.V., acting as Notified Test Laboratory, has had no influence on the selection of the sample. All test specimen within the sample were test-worthy and were received on 9 February 2018.

## 1.4 Application

The request for testing was submitted by the assignor on 3 March 2018, order or reference number or name: -. Assignment Form number: 18.A016.

## 1.5 Put out to contract

No tests were performed at third parties.

## 1.6 Privacy statement

Due to privacy reasons, the names of involved personnel that executed the tests are not disclosed in the report. However, this information is available on internal work sheets, test forms etc. in the project file.

## 1.7 Notifications, accreditations, designations

TÜV Rheinland Nederland B.V. has been notified by the Dutch Ministry of Infrastructure and the Environment as Notified Laboratory (number 1750) and Notified (Factory Production Control) Certification Body (number 0336) for the European Construction Products Regulation 305/2011 (EU).

TÜV Rheinland Nederland B.V. has been accredited by the Dutch Accreditation Council (RvA) as ISO 17025 Test Laboratory (nr. L 484) and ISO 17065 Certification Body (nr. C078).

TÜV Rheinland Nederland B.V. has been designated as Technical Service (Laboratory) by the Approval Authorities for Germany (KBA – E1) and the Netherlands (RDW – E4) for automotive safety glass (ECE R43, 92/22/EC, 2009/144/EC).

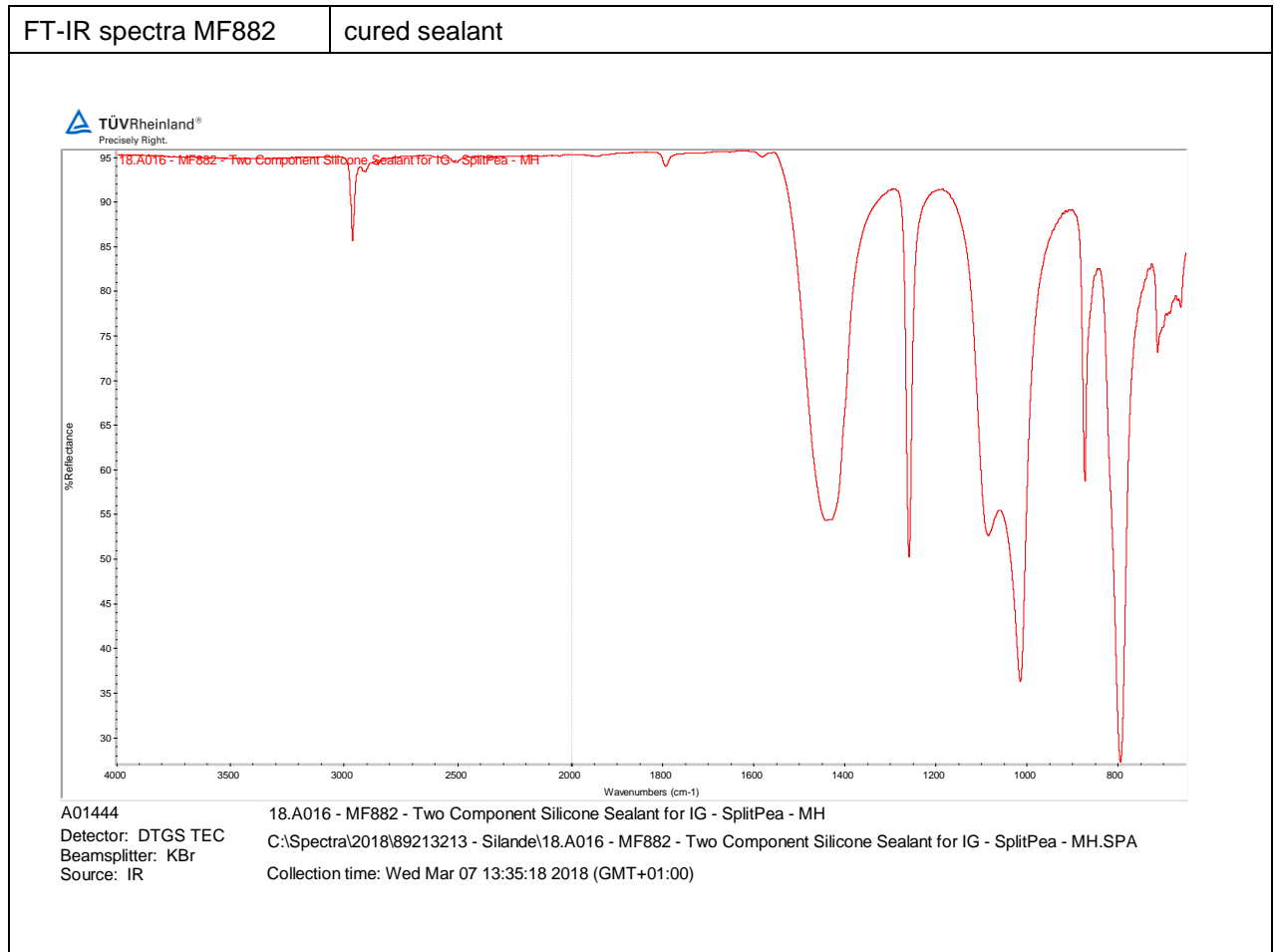
TÜV Rheinland Nederland B.V. has been recognised by the German Institute for building technics (DIBt) under number NL005 as test, control and certification body.

## 2 Test method

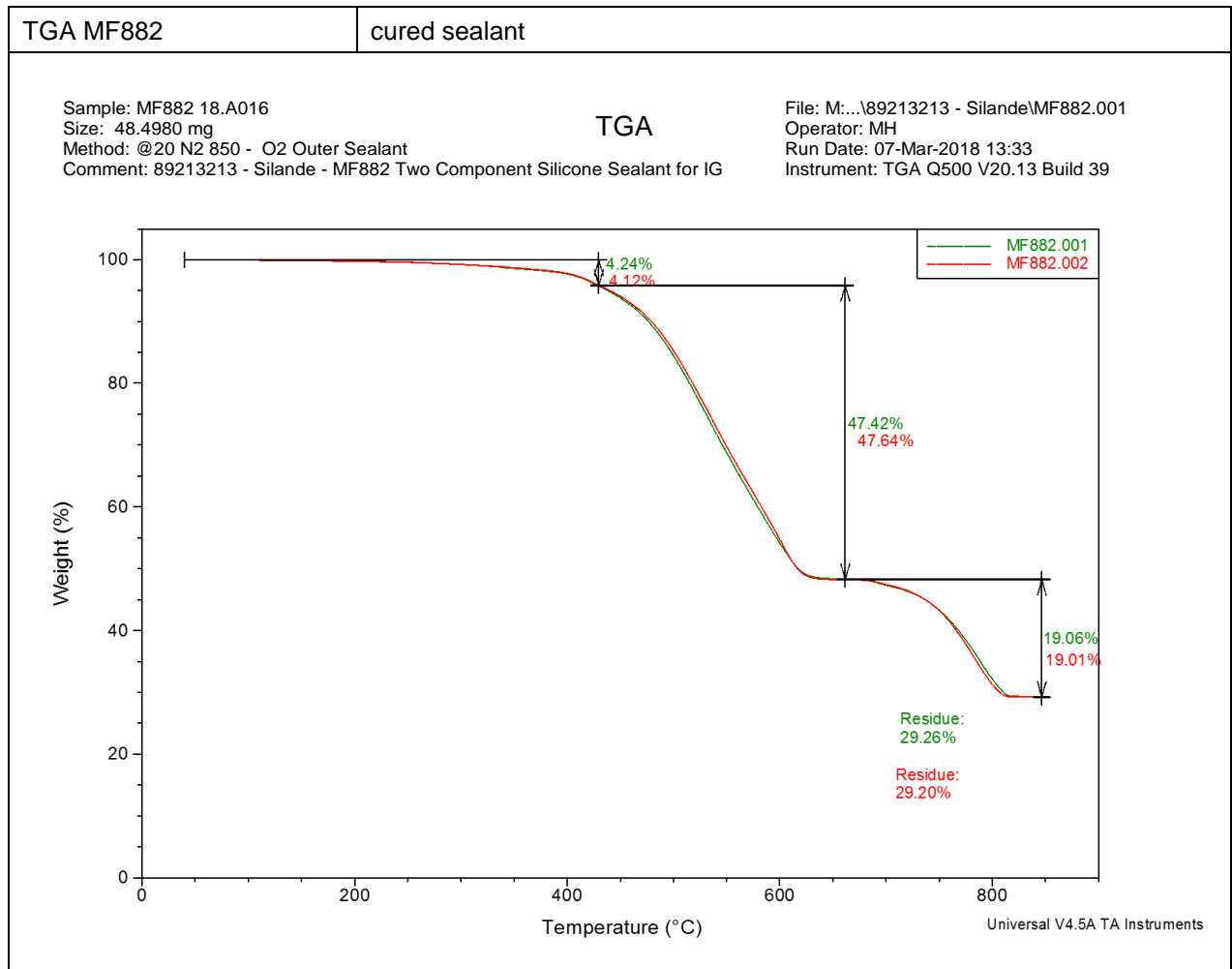
The following properties were determined

- a) FT-IR spectrum, cured material, freshly cut (SplitPea - diamond - ATR)
- b) Mass loss with Thermogravimetric analysis (TGA), EN-ISO 11358 [4], duplicate measurement.
  - Isotherm 40 °C; N<sub>2</sub> gas
  - Heating, ramp 20 °C/min to 850 °C; N<sub>2</sub> gas
  - Switch to O<sub>2</sub> gas; 10 min isotherm 850 °C

### 3 Test results



The spectra of the sample shows great similarity with the spectra of silicone. The sealant is silicone based.



		Weight Change	
Start	Stop	#1	#2
T °C	T °C	%	%
40	430	4.24	4.12
430	662	47.42	47.64
662	847	19.06	19.01
Residue		29.26	29.20

**Period of testing**

The tests took place in the on 7th March 2018

**Remark**

The test results exclusively relate to the tested objects.  
 When and if changes are made in production method and/or equipment, assessment according to this standard shall be reconsidered and re-tests shall be performed when the changes can lead to different specifications of the sealant. The decision and responsibility lies at the manufacturer.

## 4 References

- 1 EN ISO 11358 1, Plastics — Thermogravimetry (TG) of polymers — Part 1: General principles (ISO 11358-1)

## 5 Signatures

<b>Author</b> Mr. M.A.A.M. Schets, B.Sc.	Signature 
Specialist	
<b>Peer review</b> Mr. S. el Bardai	Signature 
Specialist	
<b>Approved by</b> Mr. H van Ginkel	Signature 
LSM	

**(This is the end of this report).**