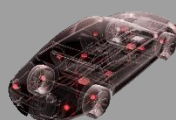


# DATA SHEET

# TRISHIELD 2.0

**TRISHIELD**  
AUTOMOTIVE 2.0

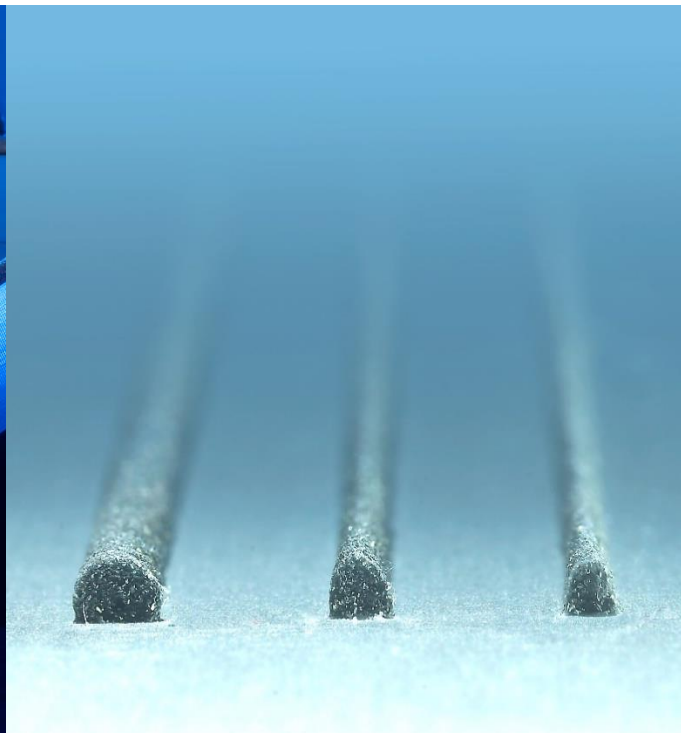
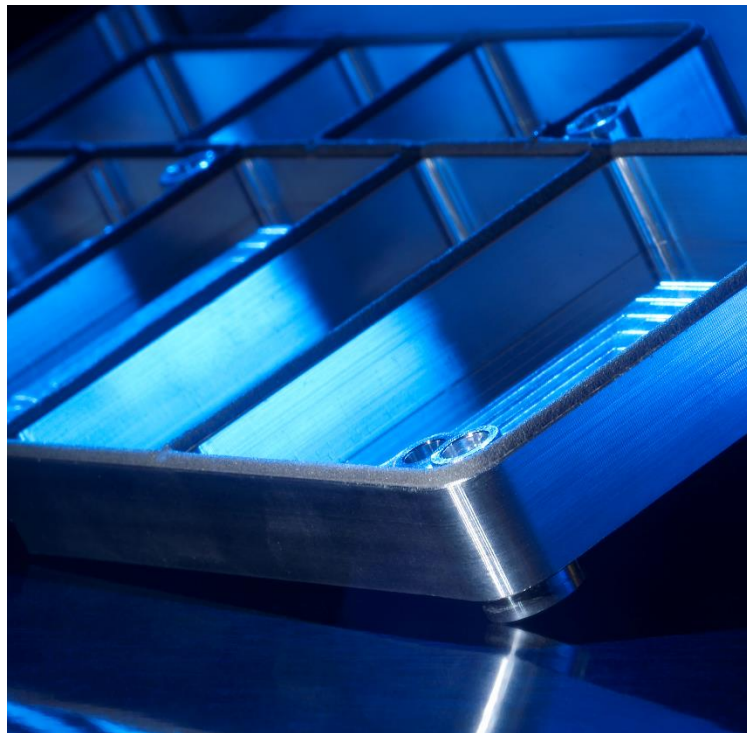


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## 1. Introduction

Trishield 2.0 is a family of dispensed EMI shielding gaskets developed by Nolato. The material series 8990 is designed to meet the requirement in automotive applications with excellent shielding and good ageing properties in rough environments.

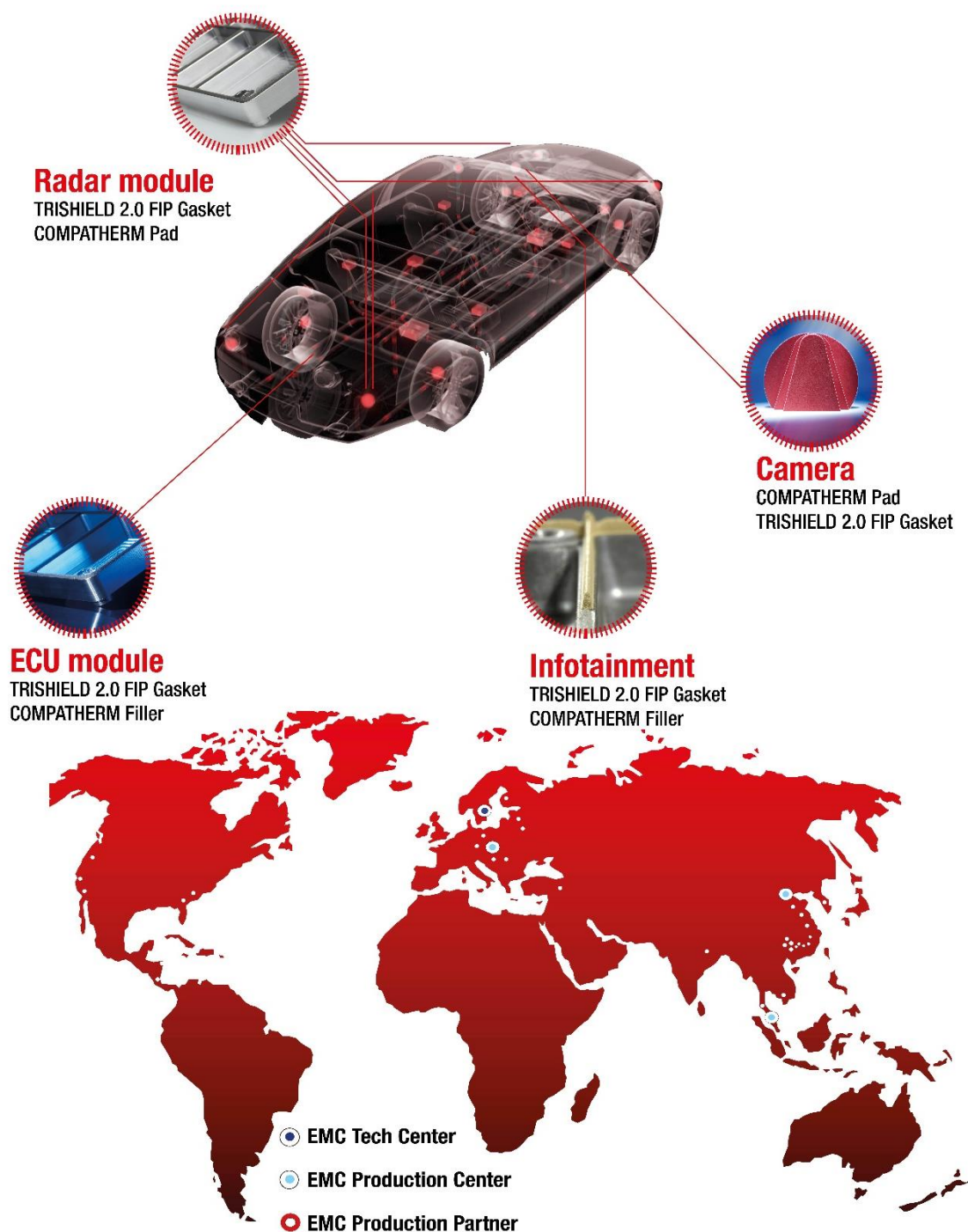
### Features and benefits

Trishield 2.0 offers up to 40% lower compression force compared to other FIP gaskets. This fact gives possibilities to big improvements.

- Excellent shielding properties
  - More than 130 dB as fresh
- Good ageing properties
  - Up to 130 dB after 1000 hours at 85C/85%RH
- Good mechanical properties
  - Low compression forces
  - Low compression set
- Global access
  - Through our EMC production centers all over the world
- Available in gasket heights of 1,3-3,0 mm.

### Applications

EMI shielding gaskets for electronic enclosures in automotive applications.



### Contacts at Nolato:

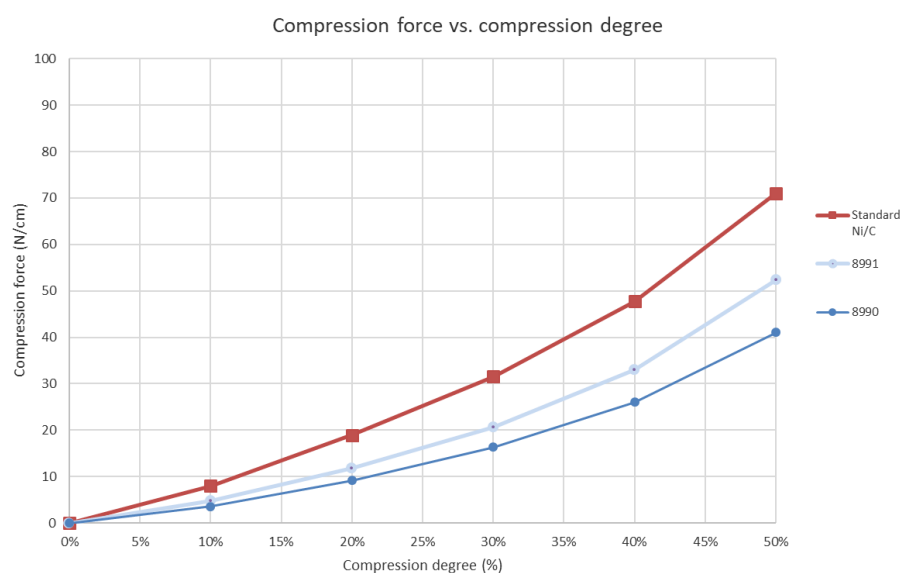
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## 2. Typical material properties

Property	Test procedure	Unit	8990	8991
Base material			Silicone	Silicone
Conductive filler			Ni/C	Ni/C
Curing			150C/30 min	150C/30 min
Volume resistivity	MIL-DTL-83528C	mOhmcm	7	3
Shielding effect Average 0.3-20 GHz Trishield Soft gasket on aluminium	Nolato cavity-to-cavity	dB	130	130
Density	ISO 2781	g/cm3	2,0	2,0
Hardness	ISO 7619	Shore A	56	67
Tensile strength	ISO 37	Mpa	1,0	0,9
Elongation at break	ISO 37	%	110	120
Tear strength	ISO 34-1C	N/mm	7,2	7,1
Compression set, 72 h, 100°C	ISO 815	%	35	60
Flammability	UL 94		V0	V0

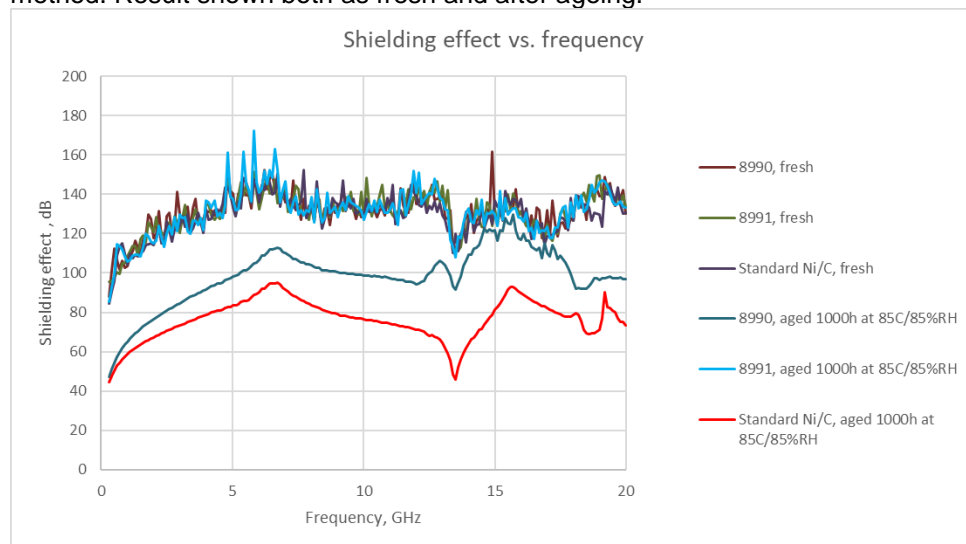
### 3. Compression force

Recommended compression degree is between 10 and 50% of the gasket height. The diagram shows the force needed to compress a gasket with 1,6 mm in gasket height. Both 8990 and 8991 shows very low compression forces compared to traditionally used standard D-shaped Ni/C gaskets.



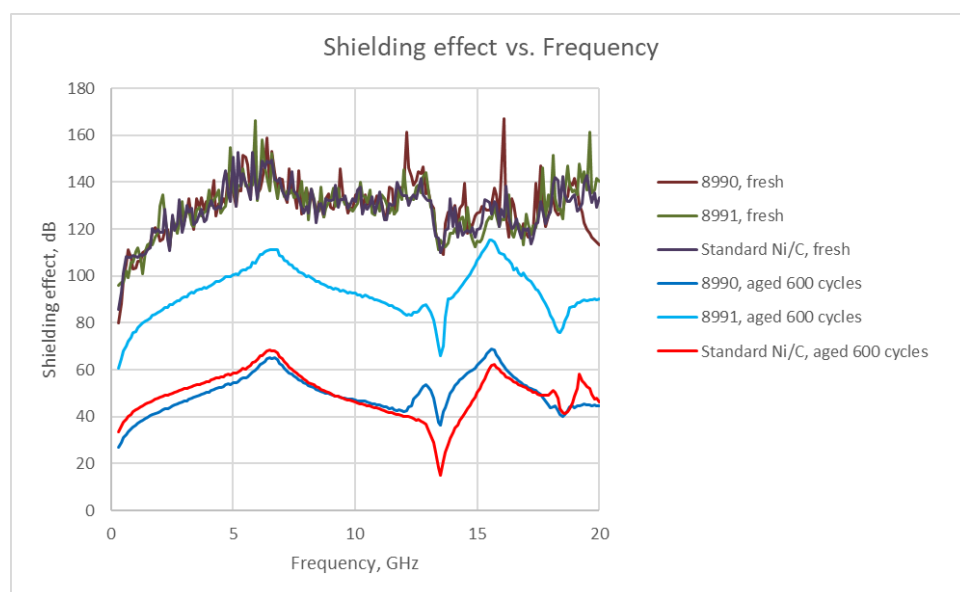
## 4. Shielding effect fresh and after ageing 1000h at 85C / 85% RH

Test is made on gaskets with 1,6 mm in height compressed to 1,0 mm during test with Nolato Cavity-to-cavity test method. Result shown both as fresh and after ageing.



## 5. Shielding effect fresh and after ageing with temperature cycling

Test is made on gaskets with 1,6 mm in height compressed to 1,0 mm during test with Nolato Cavity-to-cavity test method. Result shown both as fresh and after ageing with 600 cycles between -40 C and +70 C.



## 6. Ordering Trishield material

The product is delivered as a two pack system. Component A contains a platinum catalyst and component B the cross-linking agent needed for the curing. Please note that both component A and component B are needed in a mix ratio of 1:1.

The A component is delivered in 1000 ml cartridges. with a weight of 1,5 kg. The B component is delivered in a 1000 ml cartridge with a weight of 1,5 kg. The cartridges are delivered in a card board box with in total 9 kg. Ordering should be done on both A and B on the following part numbers.

Product	Part number	Package	MOQ
Nolato 8990 A	10899002	1,5 kg cartridge	9 kg
Nolato 8990 B	10899003	1,5 kg cartridge	9 kg
Nolato 8991 A	10899102	1,5 kg cartridge	9 kg
Nolato 8991 B	10899103	1,5 kg cartridge	9 kg

## 7. Storage conditions

Properly store the Trishield materials as delivered from Nolato Silikonteknik has a shelf life of 9 months from the production date.

In the case of delivery as A+B this includes up to 1 month of transportation and handling at room temperature.

Storage conditions:

- Store the material in the original package.
- Store in a freezer at -18 C (+-8 C).

The "Best-before-date" of each batch of Trishield materials is shown on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable.

In this case however, the properties required for the intended use must be checked for quality assurance reasons.