

**BLUESIL<sup>TM</sup>**  
**MF 760 U**

## General Purpose

**Description** **BLUESIL MF 760 U** is a hot curing silicone rubber after addition of a vulcanization agent (chosen according to the transformation process).

**Examples of applications** Moulding and injection moulding process for technical parts (sealing gaskets, grommets), extrusion profiles (windows profiles, sleeves, tubes) and calendering operations for manufactured hoses.

For extrusion applications, depending on processing conditions and geometry of the profile : the addition of 0,5 parts of BLUESIL ADD 916 improves the visual quality of profiles after vulcanization.

- Advantages**
- Only very slight re-plastifying occurring after prolonged storage.
  - Easy working procedure.
  - No post-curing, or with slight post-curing.
  - Good heat stability, up to 225°C.
  - Bright colour easily obtained.
  - Good compromise between tear strength and compression set.
  - Excellent rebound.

**Characteristics****1. Physical properties**

<i>Properties</i>	<b>BLUESIL MF 760 U</b>
<b>Type</b> (AFNOR T 40002)	MVQ
<b>Natural colour</b>	Translucent
<b>Specific gravity</b> (g/cm <sup>3</sup> )	1.16

**2. Mechanical properties**

Below we give examples of the characteristics obtained using the following as a vulcanising agent:

- After addition of 1.25% of 2.4 dichloro benzoyl peroxide at 50% and curing for 8 minutes at 115°C (1).
- After addition of 0.6% of 2.5 bis dimethyl 2,5 (peroxyde tertibutyl) hexane at 75%, and curing for 10 minutes at 170°C (2).

**BLUESIL™ MF 760 U****Characteristics (cont')**

<i>2.1- Without post-curing</i>	<i>(1)</i>	<i>(2)</i>
Shore A hardness, approx.	59	60
Tensile strength, MPa, approx.	8.2	8.0
Elongation at break, % approx.	366	449
Secant modulus at 100% approx.	2.3	1,9
Tear strength, KN/m, approx.	14	18
Rebound resilience, % approx.	61	59
Compression set (22h at 177°C, 25%)	25	20

<i>2.2- With post-curing 4 hours at 200°C</i>	<i>(1)</i>	<i>(2)</i>
Shore A hardness, approx.	63	60
Tensile strength, MPa, approx.	8.4	8.1
Elongation at break, % approx.	344	391
Secant modulus at 100% approx.	2.4	2.1
Tear strength, KN/m, approx.	15	17
Rebound resilience, % approx.	65	58
Compression set (22h at 177°C, 25%)	15	10

**3. Heat stability***on cured slabs 4 hours at 200°C*

<i>3.1- Properties after ageing over 70 h at 225°C</i>	<i>(1)</i>	<i>(2)</i>
Shore A hardness, approx.	61	64
Tensile strength, MPa, approx.	7.7	6.7
Elongation at break, % approx.	292	320
Secant modulus at 100% approx.	2.7	2.5
Tear strength, KN/m, approx.	12	14
Rebound resilience, (8 mm), % approx.	61	54

**4. Oil resistance***Variation of properties after immersion for 70h at 150°C in IRM 903 oil*

<i>Properties</i>	<i>(1)</i>	<i>(2)</i>
Shore A hardness, approx.	-16	-18
Tensile strength, % of variation approx.	-27	-25
Elongation at break, % of variation approx.	-17	-21
Volume, %	37	38

**BLUESIL™ MF 760 U****Characteristics (cont')****5. Liquid coolant resistance**

5.1 Variation of properties after immersion during 500 hours at boiling point in **Havoline XLC (50% vol.)**

<b>Properties</b>	<b>(1)</b>	<b>(2)</b>
Shore A hardness, approx.	-3	1
Tensile strength, % of variation approx.	-18	-22
Elongation at break, % of variation approx.	-14	-23
Volume, %	1	-2

5.2 Variation of properties after immersion during 7 days at boiling point in **Coolelf (Railway coolant)**

<b>Properties</b>	<b>(1)</b>	<b>(2)</b>
Shore A hardness, approx.	-7	/
Tensile strength, % of variation approx.	-28	/
Elongation at break, % of variation approx.	-19	/
Volume, %	0	/

**Packaging**

**BLUESIL MF 760 U** is delivered in 500 kg containers.

**Storage and shelf life**

When stored in its original packaging at a temperature below +40°C, **BLUESIL MF 760 U** may be stored for up to 18 months from its date of manufacture.

Comply with the storage instructions and expiry date marked on the packaging.

Beyond this date, Bluestar Silicones no longer guarantees that the product meets the sales specifications.

**Safety**

Please consult the Safety Data Sheet of **BLUESIL MF 760 U**.

Visit our website [www.bluestarsilicones.com](http://www.bluestarsilicones.com)

## EUROPE

*Bluestar Silicones France*  
21 Avenue Georges Pompidou  
F69486 Lyon Cedex 03  
FRANCE  
Tel. (33) 4 72 13 19 00  
Fax (33) 4 72 13 19 88

## NORTH AMERICA

*Bluestar Silicones USA*  
2 Tower Center Boulevard  
Suite 1601  
East Brunswick, NJ 08816-1100  
United States  
Tel. (1) 732 227-2060  
Fax. (1) 732 249-7000

## LATIN AMERICA

*Bluestar Silicones Brazil Ltda.*  
Av. Maria Coelho Aguiar, 215  
Bloco G – 1º andar  
05804-902-Sao Paulo – SP-  
Brazil  
Tel. (55) 11 37477887

## ASIA PACIFIC

*Bluestar Silicones Hong Kong*  
Trading Co. Ltd  
29th Floor, 88 Hing Fat Street  
Causeway Bay  
Hong Kong  
Tel. (852) 3106 8200  
Fax (852) 2979 0241

### Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. BLUESTAR SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and BLUESTAR SILICONES is at their disposal to supply any additional information.