



## Technical Data Sheet

### SILASTIC™ EA-2727 Adhesive SILASTIC™ EA-2727 Base SILASTIC™ Q3-3636 Catalyst

Two-component, room-temperature curing adhesive

#### Features & Benefits

- Two-component adhesive sealant
- Common catalyst for a range of silicone adhesives allowing versatile production lines
- Fast cure at room temperature
- Neutral alkoxy cure
- Non self-leveling, paste consistency
- Reduced level of volatile methylsiloxanes
- Fast cure allows rapid handling of bonded components
- Fast cure in-depth, not outside inwards like typical moisture cure adhesives
- Easy switch between silicone sealants in this range on dispensing equipment thanks to common catalyst SILASTIC™ Q3-3636 Catalyst and chemically compatible bases

#### Applications

- For the durable adhesive sealing of components which exhibit different thermal expansion rates, which are designed to operate at high temperatures, and/or where low fogging characteristics of the adhesive are desired, and /or where fast cure requirements make one part systems inappropriate.
- Typical example is the bonding of polycarbonate or glass lenses to the reflector housing (glass or plastic) of automotive headlamps and fog lamps.
- SILASTIC™ EA-2727 Adhesive is part of a range of 2-component silicone adhesives using one common catalyst SILASTIC™ Q3-3636 Catalyst for 3 bases:
  - DOWSIL™ EA-2626 Base
  - SILASTIC™ EA-2727 Base
  - SILASTIC™ Q3-3636 Base
- Recommended mixing ratios lead to cured adhesives with respective decreasing levels of volatile methylsiloxanes intended to reduce fogging inside the lamp. Depending on the design of the head or the fog lamps and after test by customer to check fit for use, SILASTIC™ Q3-3636 Base is intended to be used preferably for bonds in confined areas close to a heat source (typically fog lamps); DOWSIL™ EA-2626 Base for bonds in lamps with higher distance between the heat source (typically head lamps) and SILASTIC™ EA-2727 Base for production lines where the designs of both fog and of head lamps allow the use of one single adhesive.
- This range of Dow silicone adhesives allow versatile production of different lamp models as dispensing equipments use the common SILASTIC™ Q3-3636 Catalyst and as switching from one base to another is easy (just by flushing the base through the dispensing equipment) and as bases are chemically compatible.

UNRESTRICTED – May be shared with anyone

™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow  
SILASTIC™ EA-2727 Adhesive, SILASTIC™ EA-2727 Base, SILASTIC™ Q3-3636 Catalyst  
© 2018 The Dow Chemical Company. All rights reserved.

## Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
<b>SILASTIC™ EA-2727 Base</b>		
Color		White paste
Viscosity, avg. value	Mpa.s	190000
Density	g/cc	1.35
<b>SILASTIC™ Q3-3636 Special Black Catalyst</b>		
Viscosity	mPa.s	350000 <sup>1</sup> (ca.)
Density	g/cc	1.04
<b>SILASTIC™ EA-2727 Base with SILASTIC™ Q3-3636 Special Black Catalyst<sup>2</sup></b>		
Snap time (working time)	minutes	4–10
Tack free time	minutes	10–11
Flow	mm	< 2
Color	RAL Code	7021
<b>Properties after full cure – 7 days at 23°C – measured on 2 mm cured sheets</b>		
Durometer hardness	Shore A	42
Tensile strength	Mpa	> 2
Elongation	%	> 250
<b>Adhesion with Lap Shear – 24 hours cure at 23°C on PC/Glass and PBT-ASA Blend/Glass samples</b>		
Lap shear strength in MPA		
PC/Glass		> 1.0
PBT-ASA/Glass		> 0.8
Cohesive in %		
On PC/On Glass		100/100
On PBT-ASA/On Glass		100/100

- Note: A penetration test rather than viscosity is used to measure consistency of catalyst special black, Value 180–460 mm/10.
- Mixing ratio: 100:14 by weight.

## Description

SILASTIC™ EA-2727 Adhesive is a two-component, thixotropic adhesive with fast cure at room temperature.

The product has been developed to show good, durable adhesion to a range of plastic, metal and glass substrates, and reduced weight loss (fogging) at high operating temperatures.

## How To Use

### Mixing

The adhesive is designed to be used with SILASTIC™ Q3-3636 Special Black Catalyst, mixed in a ratio of 100 parts base to 14 parts catalyst by weight. (or 5.6 parts base to 1 part catalyst by volume). Other mixing ratios can be used but Dow should be consulted prior use. Suitable meter/mix equipment should be equipped with gear or piston metering pumps for base and catalyst, and a static mixer.

### Curing Conditions

The adhesive cures at room temperature and develops adhesion rapidly to metals, glass and plastic substrates.

The surfaces to be bonded should be clean, and free of any extraneous matter, dust or dirt.

Adhesion is normally good to most substrates<sup>1</sup> without the use of a primer, or of surface activation methods. If desired, adhesion may be enhanced via use of flame or plasma treatment of the surfaces to be bonded.

### Moisture and Heat Resistance

SILASTIC™ EA-2727 Adhesive shows good adhesive resistance in hot and humid conditions, for example 7 days in water at 70°C, or 7 days at 120°C.

<sup>1</sup>Adhesion to low energy surfaces like polypropylene can be achieved using plasma or flame treatment.

## Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## Usable Life and Storage

When stored at or below 32°C in original unopened containers, SILASTIC™ EA-2727 Base has a usable life of 12 months from date of production. When stored at or below 25°C in original unopened containers SILASTIC™ Q3-3636 Catalyst Special Black has a usable life of 5 months from date of production.

## Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## Health And Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, [consumer.dow.com](http://consumer.dow.com) or consult your local Dow representative.

UNRESTRICTED – May be shared with anyone

™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow  
SILASTIC™ EA-2727 Adhesive, SILASTIC™ EA-2727 Base, SILASTIC™ Q3-3636 Catalyst  
© 2018 The Dow Chemical Company. All rights reserved.

consumer.dow.com

**LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

