

IGS3703E one component insulating glass silicone sealant

Product Description

IGS3703E insulating glass sealant is a one-component silicone which cures to form a high strength, high modulus sealant exhibiting the following features:

- Excellent adhesion to glass, most reflective glass coatings, aluminum and galvanized steel spacers.
- Manual and robotic dispensing.
- High application rate at low pumping pressures (reduces pump wear).
- Excellent filling and tooling characteristics.
- Low sag or slump. Allows use on automatic sealing equipment.
- · Low odour neutral cure.
- Compatible with UltraGlaze* structural glazing sealants and Silpruf* weatherproofing sealants.
- Meets applicable requirements of EN1279-4.

Packaging

IGS3703E is available in 200 liter drums and 600 ml foil packs.

Colour

IGS3703E insulating glass sealant is available in black and grey.

Basic Uses

IGS3703E insulating glass sealant is designed for use as an insulating glass secondary seal also called edge seal and is easily dispensed using one component dispensing equipment which is readily available from several equipment manufacturers.

Limitations

IGS3703E insulating glass sealant is designed to be used in the fabrication of dual sealed insulating glass units. Dual sealed insulating glass units require the use of a polyisobutylene primary seal with bend, soldered, welded or butyl injected spacer frame corners.

Prior to production use, a sample should be taken from each lot of material to be used and checked for proper tack-free time and thick section cure rate prior to placing in production.

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Typical Product Data

Uncured Properties

Property	Value	Test Method	
Color	Black or Grey		
Specific Gravity	1.52 Kg/L		
Work Life (tooling time)	20-30 minutes		
Tack Free Time	45-60 minutes		
Sag/Slump	< 2 mm	ISO SAG 7390	
Curred Drementing 7 days @ 2200 F00/ DU			

Cured Properties - 7 days @ 23°C, 50% RH

Typical Properties - Cured

Property	Value	Test Method
Hardness, Durometer	42 Shore A	ASTM D2240, ISO 868
Tensile Strength	1.8 MPa	ASTM D412, ISO 37, S2
Elongation at Break	400%	ASTM D412, ISO 37, S2
Lap Shear Glass	0.7 MPa	ASTM C961-06
Service Temperature Range (after cure)	-40°C to +100°C	
VOC Content	30 g/l	WPSTM C1454
Moisture Vapor Transmission Rate	14 g H₂O· m² ·(24H) (2mm)	EN1279 - 4
Gas Permeation Rate	0.54 g/(m ² ·h)	EN1279 - 4
Cure Time (6 mm deep section) @ 21°C 50% RH	2-3 days	
Full Cure (common bead sizes)	10-14 days	

Technical Data

IGS3703E insulating glass sealant exhibits typical silicone sealant resistance to the environments usually encountered in insulating glass applications. These environments include ultra violet radiation, ozone, high and low temperature extremes and hydrolytic stability (high temperature and humidity).

IGS3703E insulating glass sealant is compatible with many types of coated high performance glass used in insulating glass fabrication. Also, it exhibits compatibility with many types of glazing sealants, particularly silicone glazing sealants. Momentive Performance Materials should be contacted with regard to specific glass types and glazing sealants for adhesion and compatibility information.

Instructions for Use

Method of Application

IGS3703E insulating glass sealant should be dispensed using one-component dispensing equipment which is readily available from several equipment manufacturers.

Consult Momentive Performance Materials regarding suggested pumping equipment start-up and shutdown procedures which cover proper operating pressures and purging requirements.

Handling and Safety

Precautions

Material Safety Data Sheets are available upon request from Momentive Performance Materials. Similar information for solvents and other chemicals used with Momentive Performance Materials products should be obtained from your suppliers.

When solvents are used, proper safety precautions must be observed. All solvents must be used only in well ventilated areas. Exposure to high vapor concentrations must be avoided. When flammable solvents are used, storage, mixing and use must be in areas away from heat, sparks, flame or other sources of ignition.

In the case of eye contact, immediately flush eyes with large quantities of water for at least 15 minutes and contact physician if irritation persists. This material should not be used in contact with foods, drugs or cosmetics.

Storage and Warranty Period

Shelf life for the IGS3703E is 13 months from date of manufacture (see use before date on compliance report) when stored in original, unopened containers below 25°C in a dry place. Storage outside in freezing conditions or above 25°C should be avoided.

Availability

IGS3703E insulating glass sealant is available in drums and foil packs. Information on ordering can be obtained from Momentive Performance Materials; the sales office nearest to you, or an authorized GE sealants distributor. For information regarding cost, contact your local distributor or area manager. Our Customer Service number is: 00.800.4321.1000.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at <u>www.ge.com/silicones</u> or, upon request, from any MPM representative. Use of other materials in conjunction with MPM sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Emergency Service

MPM maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC) and CareChem24 International also maintain an around-the-clock emergency service for all chemical products:

Location	Momentive Performance Materials Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CHEMTREC: 800.424.9300
Europe	+518.233.2500 (Albanian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Slovak, Spanish, Swedish, Turkish, Ukrainian)	+44.(0)208.762.8322 (UK)
Middle East,	. 510 222 2500	. 0(1 2 407 207 (Lobanon)
All countries, except Israel	+518.233.2500	+961.3.487.287 (Lebanon)
Middle East, Israel	+518.233.2500	+44.(0)208.762.8322 (UK)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.	

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.

CUSTOMER SERVICE CENTERS

North America	E cs-na.silicones@momentive.com			
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	RTVs and Elastomers	T +1.800.332.3390	F +1.304.746.1623	
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