



TECHNICAL DATA SHEET

EnerSEAL® JS680
Polyisobutylene Primary Sealant
for Framed IG Spacers

PRODUCT DESCRIPTION

EnerSEAL® JS680 is a one-component polyisobutylene-based primary sealant, specifically developed for the manufacturing of IG units.

BASIC USES

EnerSEAL JS680 provides a barrier to moisture vapor ingress and gas loss as an IG primary sealant, in the design of insulating glass units.

FEATURES & BENEFITS

- Flexible at low temperatures
- High ultraviolet resistance
- Very good adhesion to glass, aluminum, galvanized steel, stainless steel, and rigid polymeric warm-edge spacers
- Non-fogging
- Extremely low moisture and gas permeability rates
- Very easy to use

AVAILABILITY

Available from your local Tremco Field Representative via Tremco Warehouses.

PACKAGING

7 kg cylindrical slugs (9.75" x 7.5" dia.)

COLORS & CONSISTENCY

Black, odorless, permanently plastic

STORAGE & SHELF LIFE

Store EnerSEAL JS680 in dry plant conditions between 40 °F to 80 °F.

Shelf life in original unopened packaging is 24 months.

APPLICABLE STANDARDS

EnerSEAL JS680 when used with quality desiccant/spacer system(s) and keen workmanship will conform to ASTM E2190 and CAN/CGSB 12.8.

LIMITATIONS

EnerSEAL JS680 is not suited for the manufacture of IG units with flexible spacers. Tremco recommends the use of Tremco EnerSEAL® JS780S for these applications.

SUBSTRATE PREPARATION

Glass bonding surface must be cleaned with hot water over 120 °F (50 °C) and mechanically washing equipment. Glass and spacer bonding surfaces must be clean and dry. Coated glass may require edge deletion, so consult your glass supplier for their recommendations.

APPLICATION

- EnerSEAL JS680 can be applied with extrusion machines that are commonly used in the insulating glass industry at a temperature of 230 °F to 270 °F (110 °C to 130 °C) depending on the desired pressure and extrusion speed.
- Wearing non-bleeding gloves is recommended while handling spacer frames to prevent any oily/fatty materials from being deposited on the surfaces, since this could weaken bonding to glass and create volatile fogging.
- Apply a regular and continuous profiled bead, following a minimum pre-established thickness or coverage weight/height for your design.
- Compression must be applied to ensure regular, sufficient deformation and wet-out of the EnerSEAL JS680 bead.
- Pay particular attention to the continuity of the EnerSEAL JS680 profile beads in the corners.
- In service temperature range is -25 °F to 180 °F (-30 °C to 82 °C).

CLEAN UP

Excess sealant and smears are best removed from glass with safety glass scrapers to hold the flat razor-blade. Where mechanical removal above is not possible, uncured material on plant manufacturing surfaces can be removed with acetone. Avoid heat-guns, as they can overheat and generate fumes.

WARRANTY

A repair or replacement warranty is available on all Tremco products. Visit <https://www.tremcosealants.com/warranties/> for details.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL RESULTS
Type		Polyisobutylene IG Primary Sealant
Color		Black
Solids	EN 1279-6 G	100% Volatility of 0.12%
Specific Gravity and lbs/gal	ISO 1183	1.15 for about 9.6 lbs/gal
Moisture Vapor Transmission Rate	EN 1270-4 D	<0.05 g/M ² /day, 2 mm film
Argon Gas Permeability	EN 1279-4 D	<0.0005 g/M ² /day, 2 mm film
Application Temperature		230 °F to 270 °F (110 °C to 130 °C)
Durability	ASTM E2190, EN 1279-2 & EN 1279-3	Passes

ESJS680DS/1222

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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