

# Insulthane® OCX Plus | Open-Cell Polyurethane Foam

## Product Description

Insulthane® OCX Plus with X-Pass™ technology is a two component, sucrose-free, open-cell spray foam insulation that meets Appendix X ignition barrier requirements. It features an OCX system built from the ground up to solve the problems that slow down spray installers and cut into profit margins. It delivers many of the advantages of traditional open-cell without the unpredictability from typical OCX foams.

## Appearance

The final cured product is Stone Gray in color.

## Recommended Applications

### Residential Interior Construction:

Wall enclosures, ceilings, interior foundation walls, attic, crawl space, cathedral ceiling, duct work, rim joists, etc.

### Industrial Construction:

Wall enclosures including steel, foundation walls, underside of deck, etc.

### Commercial Interior Construction:

Walls, interior foundation walls and underside of roof decks

## Material Changeover

When changing over from other spray foams it is important not to contaminate the barrels with foreign material. Drum pumps must be wiped down before placing in new drums. Recirculation/pressure release lines must be purged out with Insulthane® OCX Plus before placing them inside barrels. It is recommended that at least one gallon of extra material be purged through when the resin begins to come through the recirculation line. Once the recirculation line is flushed, the hose must be flushed. Always perform a test spray to confirm material reactivity/uniformity before installing on-site.

## Technical Properties

Attribute	Test	Results
Density (Nominal)	ASTM D1622	0.5 lb/ft <sup>3</sup>
Dimensional Stability* (Volume Change after 28 days)	ASTM D2126	-2.0% after 1 day -3.2% after 7 day
Tensile Strength	ASTM D1623	4.35 psi
Open Cell Content	ASTM D2856	97%
Material Listing	Intertek	CCRR-0396
Color	Material	Stone Gray

## Approvals and Certifications

- Intertek CCRR-0396
- ICC-ES AC 377 Appendix X – Ignition Barrier

## Application Information

Applied at a maximum of 6" per pass. Waiting between passes increases surface adhesion and improved cell structure.

Foam must be protected from UV exposure within 90 days of application. Apply ocSPF insulation only when surfaces and ambient temperatures are within manufacturers' prescribed limits. Ambient humidity should be below 80% and substrate temperatures must be more than 5°F above dew point to avoid condensation risks.

Substrate temperature for Standard Grade: 32-120°F

## Theoretical Yield (Based on Density)

Insulthane® OCX Plus: Approx. 15,000 - 16,000 bdf.

## Thermal Resistance (ASTM C518)

Thickness (inch)	R-Value (°F·ft <sup>2</sup> ·h/Btu)
1"	4.0
2"	7.8
3"	12
3.5"	14
4"	16
5"	20
6"	23
16"	62

Thermal resistance calculated using R = 3.9/inch (excluding 1" value)

Attribute	Test	Results
Flame Spread	ASTM E84	15
Smoke Development	ASTM E84	400
Surface Burning Characteristics @ 1"	ASTM E84	Class 1 (A)
Unvented Attic & Crawlspace Without Prescriptive Ignition Barrier	AC377 Appendix X	Walls - 10" Ceiling - 14"

All testing performed by an accredited independent third-party test facility  
\* Dimensional Stability was tested without a substrate

## Processing Parameters

<b>Pressures (dynamic):</b>	1000-1300 psi
<b>A&amp;B Preheat Temperature:</b>	120-135°F
<b>Hose Temperature:</b>	125-135°F
<b>Drum Temperature in Use:</b>	68-86°F

For optimal processing of ocSPF, Elastochem recommends the above parameters in use with a Graco Fusion AP/CS gun equipped with an AR 4242 to AR 5252 chamber. The use of larger gun chambers may result in diminished yield and physical properties.

Mix the resin component for a minimum of 30 minutes with an electric or pneumatic mixer prior to use (i.e. Graco expanding blade mixer). Additional mixing at low speed throughout the day is required. The materials can be circulated through the proportioner to raise the temperatures in the drums. **The preheaters shall not be set above 95°F for drum heating/recirculation as this could have adverse effects on the performance.**

## Liquid Component Characteristics

<b>Component A:</b>	MDI (ISO) 150 - 250 cP @ 77°F 1.24 kg/L sg @ 77°F
<b>Component B:</b>	Resin 250-500 cP @ 77°F 1 kg/L sg @ 77°F
<b>Mix Ratio by Volume:</b>	1:1 of A:B

## Packaging

<b>Drums</b>	<b>Weight</b>
Part A (ISO)	500 lbs (227 kg)
Part B (Resin)	460 lbs (209 kg)

## Storage

All material provided by Elastochem are to be sealed until ready for use. Keep drums closed during storage and out of a humid environment.

A nitrogen blanket should be used in ISO barrels for long term storage. A desiccant air dryer should be used on ISO barrel to allow pressure to equalize in drum when in use. Keep drums out of direct sunlight. To ensure proper longevity of the products, unopened materials should be indoors within the temperature ranges referenced below. Please see chart below for shelf life of materials:

### Drum Storage Temperature:

<b>ISO (A)</b>	50-90°F	12 month shelf life
<b>RESIN (B)</b>	50-90°F	6 month shelf life

Please refer to product label for recommended best before date.

## Adhesion

Substrates must be free of grease, oil, dirt, and surface moisture. Moisture content of porous materials must be below 19% before application of foam. Manufacturer can be contacted for material compatibility, surface preparation techniques and adhesion on commonly encountered construction materials.

It is up to the builder or designer to determine the suitability of the material for any project. The installer must verify the compatibility of the product at the time of application due to the variability of weather conditions, material suppliers and site conditions, which may impact the performance of the product.

## Health and Safety Handling

When spraying or handling Insulthane® OCX Plus ISO and resin the following protective steps and equipment are recommended:

### Protective Equipment

- Fabric coverall (non-porous)
- Nitrile gloves
- Supplied full face fresh air respirator (while spraying)
- Use personal protective equipment (see SDS)

### Exposure

- Avoid all contact with skin
- Avoid all contact with eyes
- Do not ingest
- Do not inhale the vapours

In case of exposure, please refer to the SDS for first-aid measures

### Spills

In case of spills, contain and collect spillage with a non-combustible absorbent material, such as: sand, earth, clay-based oil absorbent (kitty-litter), etc.

## Precautions

Like many construction materials, spray polyurethane foam is a combustible product. Therefore, installers and occupants are to take precautions and safety measures to ensure the foam does not come into contact (within 3") of any devices that have a surface temperature exceeding 180°F. Once application is completed, foam shall be protected with a thermal barrier (e.g. drywall) in accordance with local building requirements.



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