



## TECNOFOAM I-2035 HFO - POLYURETHANE FOAM FOR INJECTION (APPLIED DENSITY $\pm 35$ KG/M<sup>3</sup>)

TECNOFOAM I-2035 HFO is an injection polyurethane foam system for thermal insulation, is specifically formulated to apply foam with applied density around 35 to 45 kg/m<sup>3</sup>. Its application must be carried out by the specific reactor equipment by mixing Tecnofoam I-2035 HFO (polyol side) and Tecnofoam G-2049.I (isocyanate side). The blowing agent is HFO gas.



## USES

The polyurethane foam for injection TECNOFOAM I-2035 HFO system can be used in these situations:

- it is specifically designed for thermal insulation, industry, farming or agricultural facilities.
- filling industrial pipes and parts for thermal insulation
- any application where is needed a thermal insulation behavior

**NOTE:** For other applications/situations, please, consult our technical department

|                      |                         |
|----------------------|-------------------------|
| applied density      | 35~45 kg/m <sup>3</sup> |
| thermal conductivity | 0,022 W/m.K             |
| gel time             | 15 ~ 25 secs            |
| tack-free time       | 220 ~ 310 secs          |
| fire reaction        | Euroclass F             |
| close cell content   | >90%(CCC4)              |
| application method   | specific equipment      |



## COLORS



Yellow

## GENERAL FEATURES

- TECNOFOAM I-2035 HFO is a product with high insulating capacity, easy to apply to cover all surfaces
- the application and training are done by our spray equipment TC2049 ([spray-equipment.tecnopolgroup.com](http://spray-equipment.tecnopolgroup.com)) or similar



- it does not emit any substance to the environment once installed.
- the properties of this polyurethane foam system allow it to adhere to any surface such as concrete, ceramic, metal, polyurethane foam, wood, acrylic paints (checking the situation of areas recommended).
- the application of TECNOFOAM I-2035 HFO is made without unions between applications, and providing an optimum thermal insulation surface with high thermal insulation parameters
- the properties of this polyurethane foam system allow it to adhere to any surface such as concrete, ceramic, metal, polyurethane foam, wood, acrylic paints (checking the situation of areas recommended).
- contractors and applicators must comply with all applicable and appropriate guidelines for processing, handling guidelines.

## PACKAGING

Metal drums of 250 kg for the isocyanate side, and 230 kg for the polyol side.

## SHELF LIFE

POLYOL COMPOUND: 6 months

ISOCYANATE COMPOUND: 6 months

Temperature within 5 °C ~ 35 °C, provided it is stored in a dry place, nondirect contact with the sun.

## APPLICATION METHOD

In general, you should take the following factors:

- the application of polyurethane foam system TECNOFOAM I-2035 HFO should be performed under non-presence of moisture or water from the support stand on which to apply either at the time of application as a posteriori.
- the substrate must be clean and free of dust
- NEVER SHAKE OR RECIRCULATE POLYOL COMPONENT (BLUE DRUM)
- injecting the mixed product through the reactor equipment, through perforations located on the element to be insulated.
- consider that the time of expansion of the two components, once mixed is one 25 ~ 30 seconds.
- repeat this action as many times as necessary to fill the entire element

## APPLICATION REQUIREMENTS (INJECTION EQUIPMENT)

For the formation, it is necessary to mix the two initial liquid components, isocyanates and polyols with our spray equipment TC2049 ([spray-equipment.tecnopolgroup.com](http://spray-equipment.tecnopolgroup.com)) or similar (proper maintenance and cleaning it is recommended).

The general parameters for this material will be the following:

- Heater isocyanate temperature: 35~45 °C
- Heater polyol temperature:±35~45°C
- Hose temperature:± 35~45 °C
- Pressure:>1200-1600 psi( the exact pressure depends on the kind of needs of the application)
- Mixing ratio(recommended): GU-0087-3/GU-0087-4/GU-0087-5

These temperature and pressure parameters have to be valued, ratified or be varied by the applicator, depending on the conditions of each climate zone, weather situation or projection equipment specifications.



## HANDLING

These safety recommendations for handling, are necessary for the implementation process as well as in the pre and post, on exposure to the loading machinery.

- Respiratory Protection: When handling or spraying use an air-purifying respirator.
- Skin protection: Use rubber gloves, remove immediately after contamination. Wear clean body-covering. Wash thoroughly with soap and water after work and before eating, drinking or smoking.
- Eye / Face: Wear safety goggles to prevent splashing and exposure to particles in the air.
- Waste: Waste generation should be avoided or minimized.
- Incinerate under controlled conditions in accordance with local laws and national regulations.

Contractors and applicators must comply with all applicable and appropriate guidelines for storage and safety guidelines. Anyway, consult the material and safety data sheet of the products of the system.



## COMPOUND CHARACTERISTICS

| characteristic                            | POLYOL           | ISOCYANATE(MDI) |
|---|------------------|-----------------|
| Nº OH DIN 53240-2                         | 210~ 240 mgKOH/g | ---             |
| Viscosity at 25°C BROOKFIELD VISCOSIMETER | <400~ 800 mPa.s  | 210 mPa.s       |
| NCO content ISO 14896                     | ---              | 31 %            |
| Specific weight at 25°C                   | 1,10 g/cm³       | 1,23 g/cm³      |

## APPLIED SYSTEM CHARACTERISTICS (REACTION)

| CHARACTERISTIC                              | VALUE         |
|---|---------------|
| Gel time at 20°C                            | 20 ~35 secs   |
| Tack free time at 20°C                      | 220 ~310 secs |
| Density free rise at 20°C                   | 32 ~37 kg/m³  |
| Closed-cell content ASTM 2856               | >90% (CCC4)   |
| Thermal conductivity value t a20°C EN-12667 | 0,022 W/mK    |
| GWP(Global Warming Potential)               | 1             |
| ODP (Ozone Depletion Potential)             | 0             |
| Fire reaction EN-13501                      | Euroclass F   |

To obtain more information, consult the full document Declaration of Performances of a particular system (consult our technical department).

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