tecnofoam
I-2035

POLYURETHANE FOAM DENSITY 35 - 40 KG/M³

The product I 2035 is a system composed of two components (polyol and isocyanate) produces polyurethane foam of an applied density from 35 to 40 kg/m³ ,is suitable for injection isolation application as on ducts , tubing, colds stores and rooms. It is free of substances harmful to the ozone layer and gases that promote the greenhouse effect (no contains HFCs, HCFCs, VOCs, etc ...).

USES

- It is specifically designed for thermal insulation, industry, farming or agricultural facilities.
- Filling industrial pipes and parts for thermal insulation.

Applied density	35 ~ 40 kg/m³
Thermal conductivity	0,027 ± 0,002 W/m.K
Fire reaction	E

APPLICATION'S CONDITION

I 2035 system do not need the addition of additives for use. The machine used for I 2035 system processing has to be capable of dosing components (polyol and isocyanate) in equal proportions by volume (+ / - 2%) and mixing at pressures between 60 and 120 kg/c². The temperature of the machine, heaters and hoses should be set between 25 and 60 ° C depending on environmental conditions, to obtain an optimal mix.

In addition of changing ostensibly product performance, weather conditions, has influence on the quality of the foam in the spraying works. Therefore it is important that the temperature and the substrate surface, has to be between 5 ºC and 40 ° C, otherwise there may be areas with poor compliance, or dimensional changes more than expected. The substrate must be clean and dry and the humidity should be below 80%, because a high humidity can cause density alterations of the final product, and less adhesion to the substrate. Wind speed during the application must not exceed 30 km / h to avoid high consumption of materials; the irregular surface spraying could train particles that can cause serious problems of dirt surrounding the job place. During favorable environmental conditions, the adhesion of the foam, on the commonly used substrate, is excellent, provided they are clean, dry and free of rust.

In all cases, before applying the foam is needed to perform an adhesion small test to ensure good fixation. In applications with high temperature gradients place a vapor barrier on the warm side of insulation system to prevent condensation. Smooth metal surfaces must be protected by an anti-corrosion primer before being covered with foam.

On smooth surfaces without pores, galvanized steel, polypropylene, etc. ... should be primed for better adhesion and union of insulation system.

STORAGE REQUIREMENTS

Storage temperature should be between 10 and 25 ° C. Containers (full or empty) should not be exposed to direct sunlight or heat sources such as stoves, radiators, etc. ... because they can generate pressure inside ,and will be dangerous its handling or manipulation .

The components are moisture sensitive, must always be kept in airtight containers and be protected against the ingress of moisture at all times to avoid disruptions in the final product or rendered useless for treatment.

EXPIRY

Polyol and isocyanate components have an optimal time established for use in which retain their physical and chemical properties favorable for further processing and obtaining foam which has all its properties. Once this period is ended, it appears a possible destabilization and gradual degradation of all chemical and physical characteristics of the final product will be more pronounced as time elapsed. In proper storage conditions and in original packaging, the optimal period for consumption is 3 months for polyol and 6 months for isocyanate from manufacture's time.

PERSONAL PROTECTION

- 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 air.
- Waste: Waste generation should be avoided or minimized. Incinerate under controlled conditions in accordance with local laws and national regulations.

PROPERTIES OF APPLIED FOAM AND COMPONENTS:

Mixture ratio of components	
Polyol I 2035	100 (by volume) ; 100 (by weight)
ISOCYANATE G-2049.1	100 (by volume) ; 105 (by weight)

COMPOSITION INFORMATION

polyol hydroxyl index	220 – 260 mg KOH (UNE 53985-1)
Polyol water content	2 to 2.5 (ISO 14.897)
Isocyanate NCO	30 – 32 % (UNE-92120-1)

REACTIVITY *

Cream time	25 +/- 3 seconds (UNE-92120-1)
Rise time	90 +/- 10 seconds (UNE-92120-1)

Free density Glass	38 to 42 grams / liter (UNE-92120-1)

APPLIED FOAM CHARACTERISTICS

Thermal conductivity (transfer at 10 °C)	0.030 ± 10% (W / m • K) (UNE in 12667: 2002)
Water absorption **	<5% (volume) (UNE EN 13.501-1)
Density applied	from 37 to 47 grams/liter (UNE EN 1602)
Reaction to fire	Euroclass E (UNE in 13501-1:2007 + A1: 2010)

(*) In laboratory conditions, according to the UNE-92120-1

(**) The absorption of water by the rigid polyurethane foam is produced depending of environmental conditions and can take place by moisture or diffusion and condensation of steam. Is influenced primarily by the density and dimensions. In any case, the moisture content in practice, not exceed 5% by volume.

CE