

Announcement N° CC13222: ERIFLEX FLEXIBAR ADVANCED, IBS & IBSB ADVANCED and FLEXBUS – UV Tests

Date: October 26th, 2022

- We, nVent, confirm that ERIFLEX FLEXIBAR ADVANCED, IBS & IBSB ADVANCED and FLEXBUS are tested according to the AN3 UV radiation (IEC 60364-5-52, Chapter 522.11: Solar radiation (AN)).
Those tests were performed with following conditions:
 - 6 x 168 h (with various environmental conditions as shown in Annex 1).
 - Test accepted if elongation and tensile strength are within 70% of the original samples.
 - Samples where not under tensile stress during test procedure.Results and environmental conditions in **Annex 1 & 2**.

- We, nVent, confirm that ERIFLEX FLEXIBAR ADVANCED, IBS & IBSB ADVANCED and FLEXBUS are tested according to ISO 4892-2 (Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps), 102 min of dry exposure, and 18 min with water spray, repeated for 1000h.
Tested samples' tensile strength and elongation are within 80% of the original samples (respectively 5.7% and 10.2%).
There is not any dielectric difference between exposed and no exposed samples.
See **Annex 3** for more details on testing environmental conditions.

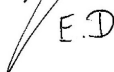
Conclusion: the material is compliant for the UV exposure: its mechanical properties (tensile strength and elongation at break) shows good retention after 1000h exposure.
Regarding the electrical properties, there is no variation between the exposed and non-exposed sample.

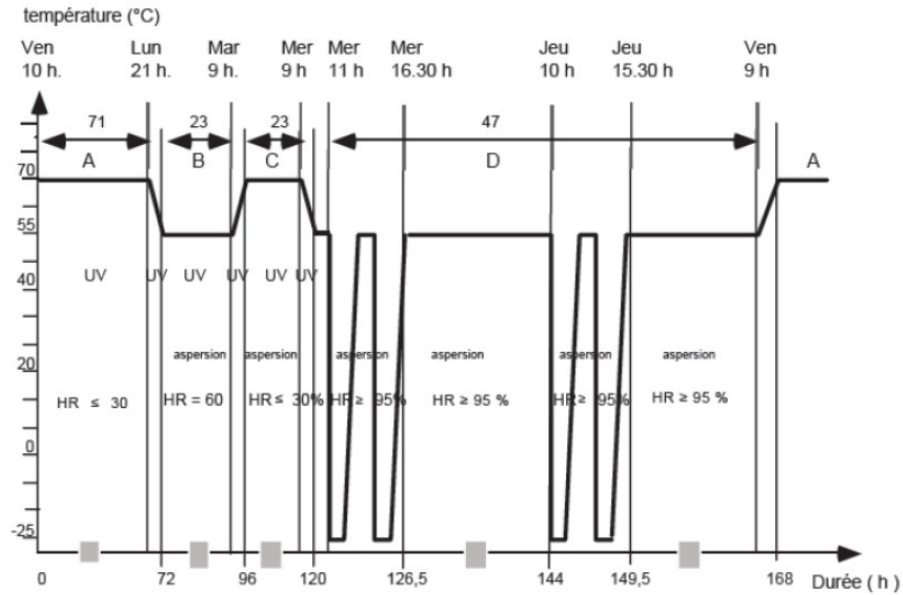
Best Regards,

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Annex 1:
Environmental conditions details for AN3 classification

Annex 2:
Results

Résultats :

Référence Echantillon	Paramètres	Résultats traction	Remarques
Matière 1 - référence ADVANCED (HF33), sans allongement	Sans exposition UV mais test de traction réalisé en même temps que les échantillons ayant subi 6 x 168h	Voir détail en Annexe ci-dessous	Néant
Matière 1 - référence ADVANCED (HF33), sans allongement	Après 3 x 168h d'exposition, traction faite en même temps que les échantillons ayant subi les 6 x 168h	Voir détail en Annexe ci-dessous	Néant
Matière 1 - référence ADVANCED (HF33), sans allongement	Après 6 x 168h	Voir détail en Annexe ci-dessous	Néant

N° échantillon	Allongement à la rupture entre les échantillons après 6 cycles et les échantillons à l'état initial	Allongement à la rupture entre les échantillons après 6 cycles et les échantillons après 3 cycles	Resistance à la traction entre les échantillons après 6 cycles et les échantillons à l'état initial	Resistance à la traction entre les échantillons après 6 cycles et les échantillons après 3 cycles
Matière 1 - référence ADVANCED (HF33), pour le test sans allongement	7,9	0,2	8,8	4,6

Annex 3:

Environmental conditions details for ISO 4892-2, Method A cycle 1
(Typical Weathering cycle: simulation of outdoor exposure)

Method A — Exposures using daylight filters (artificial weathering)						
Cycle No.	Exposure period	Irradiance ^b		Black-stand-ard temperature °C	Chamber temperature °C	Relative humidity %
		Broadband (300 nm to 400 nm) W/m ²	Narrowband (340 nm) W/(m ² ·nm)			
1	102 min dry 18 min water spray	60 ± 2 60 ± 2	0,51 ± 0,02 0,51 ± 0,02	65 ± 3 —	38 ± 3 —	50 ± 10 ^c —

WARNING:

1. nVent products shall be installed and used only as indicated in nVent product instruction sheets and training materials. Instruction sheets are available at www.nVent.com and from your nVent customer service representative.
2. nVent products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
3. All instructions must be completely followed to ensure proper and safe installation and performance.
4. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death. The customer is responsible for:
 - a. Conformance to all governing codes.
 - b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified engineer.
 - c. Using appropriate industry standard hardware as noted above.

SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed
Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.