

BERYLLIUM

Precautions of use / Manuel de précautions d'emploi



English : page 2
Français : page 7

- DE Bedienungsanleitung lesen
- ES Acceda a las instrucciones de uso
- IT Accedi alle istruzioni per l'uso
- PT Ir para o manual de serviço
- NL Ga naar de gebruiksaanwijzing
- RU Перейти к инструкции по эксплуатации
- PL Przejdź do instrukcji obsługi
- CN 访问使用说明
- KR 사용설명서 보러가기
- JP サービスマニュアルに移動します
- AR اذهب إلى دليل الاستخدام



www.focal.com/beryllium/

BERYLLIUM

Precautions of use

FOCAL JMLab, a stock company incorporated under the laws of France and registered with the trade and companies registered of Saint-Etienne under number 344 394 309 000 35, having its registered office at 108 rue de l'avenir, 42350 La Talaudière, France.

The speakers concerned by this manual use a pure Beryllium inverted dome tweeter system, capable to extend the bandwidth up to 40Khz.

Regarding the potential hazardousness of Beryllium, a raw material constituting the tweeter, some instructions (defined hereunder) must be respected by the user of these speakers in order to prevent any risk of absorption of said material.

Nevertheless, in solid form and based on the current state of knowledge at the date of printing of this precautionary manual, the risks are limited, being specified that the hazardousness of the Beryllium mainly results from its inhalation, ingestion or contact in vapour form or microparticles.

1. Characteristics of Beryllium



DANGER

Carcinogenicity - Category 1B	H350 i: May cause cancer when inhaled
Acute toxicity - Category 2	H330: Fatal if inhaled
Acute toxicity - Category 3	H301: Toxic if swallowed
Specific target organ toxicity, repeated exposure - Category 1	H372: Causes damage to organs through prolonged or repeated exposure
Serious eye damage / Eye irritation - Category 2	H319: Causes serious eye irritation
Specific target organ toxicity (single exposure) - Category 3	H335: May cause respiratory irritation
Skin corrosion / Irritation - Category 2	H315: Causes skin irritation
Skin sensitivity - Category 1	H317: May cause an allergic skin reaction

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2. Precautions of use

It is essential to scrupulously respect the following precautionary measures.

2.1. Tweeters including a Beryllium dome should be handled with caution.

As a consequence, the users of the speakers have in particular to strictly ensure that the protective grille and all protective means on the tweeter is well maintained and in no circumstance take the Beryllium from its original location.

Generally, the speakers should be kept out of the reach of children, especially the access of the tweeters and the dome of Beryllium.

2.2. The Beryllium dome should never be in contact with abrasive material

Beryllium is a stable product at room temperature. Nevertheless, it reacts with the following acids: sulphuric, hydrochloric, and hydrofluoric (with hydrogen release).

Conditions to avoid: heat, sparks, open flame, or any other sources of ignition. Beryllium is incompatible with oxidizing agents, and also notably bromine pentafluoride and performic acids. It explodes when heated with magnesium.

In finely divided form, Beryllium is a moderately flammable product. In a contained space, dust cloud of the metal may explode in the presence of a source of ignition. In case of fire, Beryllium releases highly toxic smoke and vapour.

In case of fire, the recommended fire extinguishing agents are engineered powders for combustible metals or, failing that, other inert powders. It is also recommended to wear adequate personal protective equipment to prevent contact with the substance or its products of combustion as well as full self-contained breathing apparatus.

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2.3. Generally, prevent skin or eye contact, ingestion or inhalation of all or part of the Beryllium dome. The manufacturer underlines the fact that its absorption by inhalation, dermal route or ingestion can cause severe physical afflictions.

3. In the event of damage to the dome

In the case that the Beryllium dome is damaged in whatever form, its whole surface should be covered over. In such case, it is recommended to contact your retailer in order to dismantle and replace the tweeter by the relevant department of the distributor.

If the dome is broken, particles of Beryllium must be carefully recovered and placed in a sealed plastic bag. It should be returned to the retailer at the same time as the speakers.

4. First aid

If inhaled: in case of inhalation of smoke or dust of Beryllium, bring the person outside or to a ventilated area and put the body into a half-sitting position so that the person can breathe comfortably. If not breathing, give artificial respiration. Take the person to the nearest medical emergency treatment centre or call a poison control centre.

In case of contact with eyes: flush immediately and bathe the eyes with water for 15 minutes or until removal of the product. Remove contact lenses if present and if it is easy to remove them. It is recommended to see a doctor.

In case of contact with skin: immediately remove contaminated clothing and shoes. Throw away clothing and shoes. Wash the skin with soap and water for at least 15 minutes. Immediately and carefully clean the cuts and wounds. Any particles of Beryllium which stick under the skin must be removed. See a doctor.

If swallowed: if victim is conscious and alert, rinse mouth with water and give some water to dilute. Seek immediate medical assistance. Never give any liquid if the victim is unconscious or convulsing. Vomiting should only be provoked by a doctor or poison control centre's order. See a doctor immediately.

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5. End of life of the speakers

Your product Focal-JMlab was designed and made with materials and components of high quality susceptible to be recycled and reused.



This symbol means that any electric or electronic devices should be disposed of separately to household waste.

This device shall not be throw in the nature nor eliminated with household waste. This product should not be disposed of an where other than the municipal waste reception centre or to a centre of recycling.

For further information about Beryllium, please contact us directly at: beryllium@focal-fr.com



UTOPIA

Technical specifications /
Spécifications techniques

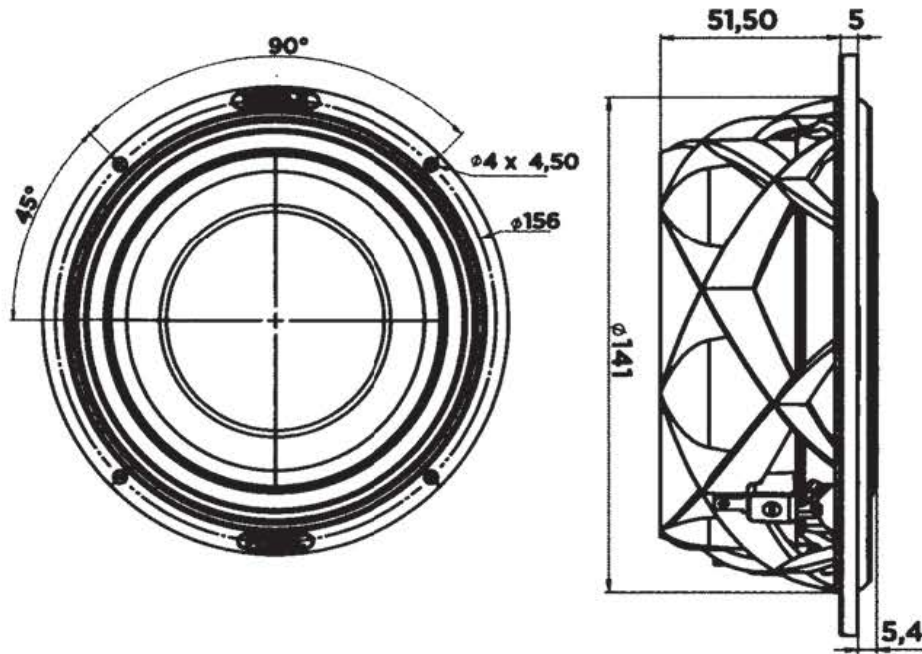
6WM: 2
8WM: 4
TBM: 6
3.5WM: 8
SUB10WM: 10
165W-XP: 12

6WM

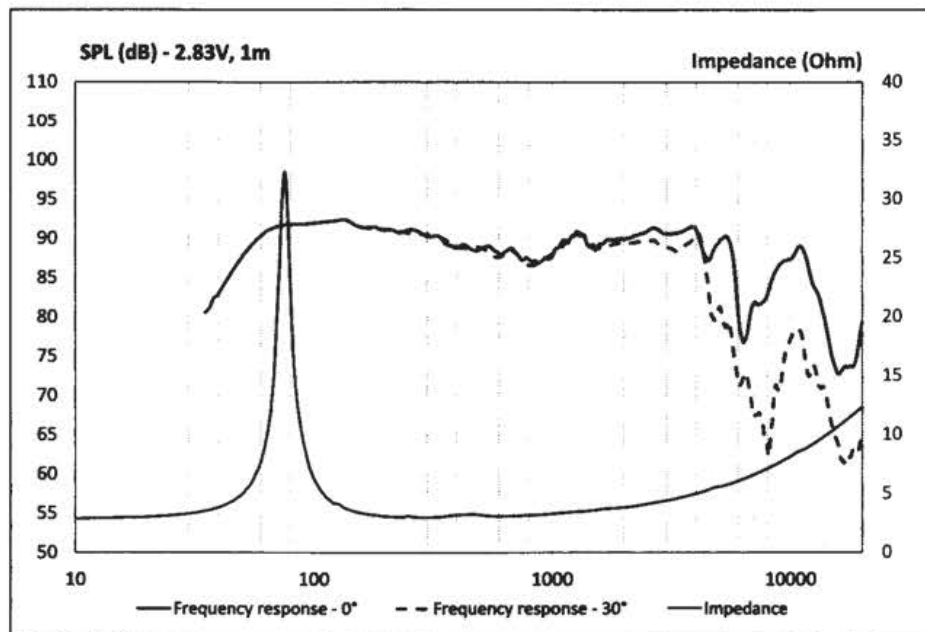
Woofer 6^{1/2}"

MECHANICAL DRAWING

Dimensions in mm



FREQUENCY RESPONSE



6WM

Technical specifications

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SPECIFICATIONS

Nominal power	100W	
Maximum power	200W	
Sensitivity (2.83V/1m)	91.5dB	
Nom. Impedance	4Ω	
Cone	W	
Surround	Butyl	
DC resistance	2.7Ω	
VC diameter	80mm	3 ¹ / ₈ "
Former	Glass Fiber	
Layers	1	
Wire	CCAW	
Magnet D x H	75x4mm	2 ¹⁵ / ₁₆ " x 0 ³ / ₁₆ "
Net weight	1,050g	2.3lbs

PARAMETERS

Rdc	2.7Ω
Fs	70Hz
Mms	14.5g
Cms	0.36mm/N
Vas	8.5l
Qts	0.79
Qes	0.86
Qms	10.5
Bxl	4.4N/A
Sd	132.7cm ²
SPL	89.3dB
Xmax	5.5mm



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You have just purchased a Focal product. We would like to thank you and welcome you to our world, the world of High-Fidelity... Focal has been designing, developing and manufacturing speaker drivers and loudspeakers for more than 35 years, and more recently headphones. Innovation, Tradition, Performance and Pleasure are our key values. Wherever you are, only one goal for us: gathering you around a common passion, the rich, faithful and pure sound. Listen Beyond.

MADE IN FRANCE

The speaker driver is what is at the core of Focal's DNA, it is what the historical root of our trade is built around: technology, mechanics and sophisticated materials. Focal's history is written every day by men and women whose unique expertise pushes back the limits of sound reproduction. We are proud to have succeeded in keeping our own manufacturing facilities, which was the only feasible way for us to continue innovating and developing our expertise and technology. This has given us unique recognition, that of being awarded a Living Heritage Company label (Entreprise du Patrimoine Vivant).

EXCELLENCE

Whether it is a loudspeaker, a studio monitor, a car audio kit or headphones, we only develop products that we are certain will become a reference in their category. All our products are designed and manufactured with the same quality standards, by the same teams of engineers and specialised operators in order to provide the best audio solutions, whatever the size or price, from entry-level products to luxury ranges. That is what makes our offer and our brand unique.

INNOVATION

Innovation means pushing back the limits of the impossible. Innovation requires a certain frame of mind, the freedom to brave the extravagant, to dare the impossible... Utopia perfectly symbolises this. Above all, it is a desire which has been part of Focal since day one, a desire driven by the passion for sound and all its delights. Today, innovation goes way beyond technology, it also involves aesthetics and usage. And to achieve innovation without constraint, there was no other way for Focal than to master each and every process, including manufacturing of course...

PLEASURE

That is the ultimate goal, our quest: to offer you audio devices which bring you closer to artists and their intentions, their intimacy, with pure, faithful sound whose harmonic richness paves the way for listening pleasure. What is more, today, music follows you everywhere... From the recording studio to the living room, from your car to the street, and we want to be the only ones taking care of reproducing your music for your greatest pleasure.

classic loudspeakers



headphones & multimedia



car audio



studio monitors



FOCAL

