

EuroSiv

3A Molecular Sieve Desiccant

Eurosiv 3A molecular sieve desiccant is a high performance adsorbent developed for the quality-focussed insulated glass manufacturer.

It is characterised by a high humidity adsorption capacity and a low air or gas adsorption value.

Eurosiv is suitable for all insulated glass systems, whether solvent-free or gas filled.



Standard bead
(1-1.5mm)

Extra-Mini bead
(0.5-0.9mm)



THE BENEFITS OF EUROSIV:

- ✓ Very low initial moisture content, giving insulated glass units a long working life
- ✓ Selective adsorption for production of both standard units and gas filled units
- ✓ Accurate bead size selection for efficient use in automated filling lines
- ✓ Very low dust levels increase the effectiveness of the desiccant while reducing health and safety issues and damage to machinery
- ✓ It is a "Low deflection" desiccant. This means that it does not adsorb or re-adsorb Nitrogen – therefore reducing stress at the glass edge
- ✓ Supplied in air-tight packaging to retain the high quality and long life of the product
- ✓ Approved by several recognised test houses and meets the requirements of EN1279 when used in insulated glass production

THERMOSEAL
GROUP
Dedicated to Insulated Glass

The UK's leading supplier of insulated glass sealed unit components and sealed unit manufacturing machinery.

Call **0845 331 3950** (+44 (0)121 331 3950 from outside of the UK) or visit **thermosealgroup.com**

30 YEARS OF QUALITY



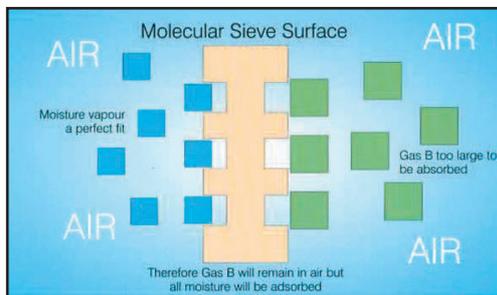
Why we use desiccant in insulated glass (IG) Manufacturing

When we bring two panes of glass together and seal them, air is inevitably trapped in the space between them. This air contains water vapour (as well as other gases) which if not removed can cause condensation and unit failure. Molecular sieve desiccant is designed to adsorb this initial water vapour. It is important that there is enough desiccant present to adsorb both the moisture initially trapped inside and the moisture passing through the unit over its working life. This will prevent moisture from condensing on the glass surface and prevent premature unit failure.

Forms of Desiccant used in IG Manufacturing

Molecular sieve desiccants for the manufacture of Insulated Glass (IG) units can take two forms. Firstly, when spacer bar with a cavity space inside is used (either metal spacer or warm edge), a desiccant comprised of small beads such as EuroSiv is used to fill the cavity inside the bar – standard bead (1-1.5mm) or Extra-Mini Bead (0.5-0.9mm). Alternatively, a foam spacer system such as Thermoseal Group’s own Thermoflex warm edge spacer is pre-desiccated with a 3A desiccant.

What is a 3A Molecular Sieve Desiccant?



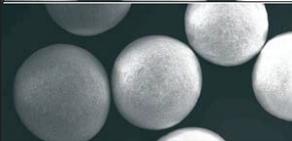
A 3A or 3 Angstrom Molecular Sieve Desiccant such as EuroSiv is a desiccant which selectively adsorbs moisture vapour and not other inert gases used in the construction of IG units – e.g. Argon, Krypton and Xenon. EuroSiv is a desiccant with uniform pore diameters of 3 Angstroms (Angstroms are the unit measurement of the pore size), which is large enough to adsorb water vapour molecules, but small enough to avoid adsorbing inert gas molecules. Inert gases can help to improve the performance of the glazing which contributes to achieving a better Window Energy Rating. It is vital to the long-life of a high performance unit that inert gases are not adsorbed by the desiccant.

Quantity of desiccant required for long-life IG units

Traditionally, for an aluminium spacer frame, manufacturers fill one long and one short side of spacer with desiccant. Due to the smaller internal cavity in warm edge spacers such as Thermobar, it is recommended that manufacturers fill three to four sides of the spacer frame in order to attain the same unit life. This requires a similar volume of desiccant as filling aluminium frames. Please note that the internal cavity in warm edge bars may vary between manufacturers. Therefore, we recommend that you check with your warm edge supplier for their desiccant filling recommendations to ensure the correct volume of desiccant is used to achieve optimum IG unit life expectancy.

For further information about what makes a desiccant a suitable quality for IG manufacturing, please see the document ‘7 Steps to Selecting a Quality Desiccant’ which is available for download from www.thermosealgroup.com.

Product Range

EuroSiv Bead Size		Product Code	
		Box (25kg)	Drum (150kg)
EuroSiv Standard Bead 1-1.5mm (for manual filling)		✓	-
EuroSiv Extra-Mini Bead 0.5-0.9mm (for auto filling)		✓	✓

All desiccant supplied by Thermoseal Group is subject to regular and random in-house testing to ensure a guaranteed high grade product for making high quality sealed units with longevity.

Further information on EuroSiv desiccant is also available. Please refer to the ‘EuroSiv Material Specification Sheet’ and ‘EuroSiv Material Safety Data’ documents which are downloadable from the Group’s website.

