# ₹camfi

# CamPure 32 Molecular Filtration Media



- UL 900 classified for flammability
- High quality chemical adsorbent.
- Targets hydrogen sulphide for supply side and sulphur dioxide for exhaust
- Ideal for biogas applications
- Various packing options available

CamPure 32 is a high quality chemical adsorbent based on a combination of mineral and activated carbon powders, treated with a chemical impregnation system. CamPure 32 is the ideal product to remove hydrogen sulphide contamination from methane produced by anaerobic digestion (AD) processes. This important pre-treatment prevents corrosion in Biogas engines and grid injection damage which can lead to expensive unplanned maintenance downtime.

### State of the art manufacturing process

CamPure 32 is produced in Camfil's modern state of the art manufacturing plant according to strict QA procedures. CamPure 32 utilises a chemical adsorption mechanism and previously adsorbed target contaminants may not be subsequently desorbed into the clean air.

The spherical particle geometry allows for low pressure drop characteristics and even airflows across media beds and filters.

### Suitable for fire sensitive applications

CamPure 32 does not support combustion and is recommended for fire sensitive applications.

Target gases include:

- hydrogen sulphide and sulphur dioxide
- nitrogen dioxide
- chlorine

CamPure 32 may be used as a replacement media in Camfil equipment, or in other manufacturers' equipment.

### "As new" condition packaging

Each packaging option of CamPure media goes through the vacuum packing process before shipment. This procedure provides two benefits.

- The removal of air from around the media will extend the "as-new" condition of the media.
- The tightness of the packing will help prevent movement of the media, attrition and dust formation during transport and handling.

#### ISO 10121-1:2014 performance tested

All CamPure media has gone through performance test in accordance to the test method listed in the ISO 10121-1:2014 document. The test conditions depicted in the standards are closely reflective to actual operating conditions.

With the performance data obtained from these tests, the media selection process will be significantly improved based on expected efficiencies at various operating conditions.

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### CamPure 32 Molecular Filtration Media

### **Properties**

| Specification                        | Value   | Method   |
|--------------------------------------|---|--|
| Base media                           | Spherical beads co-formed from mineral and activated carbon powders         |  |
| Impregnation system                  | chemical impregnation   |  |
| Typical moisture content (as packed) | 18%   | ASTM D2867   |
| Typical apparent density (as packed) | 700 to 900 kg/m <sup>3</sup> (43.7 to 56.2 lb/ft <sup>3</sup> )             | ASTM D2854   |
| Minimum crush strength               | 1.0 kg (2.2 lb)   | Camfil in-house test                                 |
| Nominal Size                         | 2.36 – 5.6 mm (3/32" – 7/32"), 5% oversize, 5% undersize                    | Others available on request                          |
| Flammability                         | UL 900  | UL   |
| Hydrogen Sulphide capacity           | 50% wt/wt minimum   | Measured in a real installation at a biogas facility |
| Recommended contact time             | Contact Camfil technical services for evaluation of<br>specific application |  |

### **Optimum Operating Conditions**

Temperature :  $-21^{\circ}$ C to  $60^{\circ}$ C ( $-5.8^{\circ}$ F to  $140^{\circ}$ F).

Humidity : 30 - 95%, condensing atmosphere should be avoided.

Note : Actual performance of the media may differ due to varying operating conditions and concentrations of gas mixtures present in the atmosphere.

Camfil recommends that the media is tested on a periodic basis for media life analysis. The test provides an indication of balance removal capacity of the media. With this information, the usage of the media can either be maximized or the replacement of the media can be planned in advance before the overall performance of the system starts to deteriorate.

### Packaging

Packaging options available are :

- 500 kg (1,102 lb) jumbo bag. Woven PP with PE liner. Approx. size 915x915x915 mm (3x3x3 ft). Fully opening top, bottom discharge point. Bags are vacuum packed and shrink-wrapped to restrict movement of contents.
- 28.3 litre (1 ft<sup>3</sup>) box with PE liner. Cartons are vacuum packed to restrict movement of contents.

CamPure media can also be supplied in Camfil modules such as :-

- Vee-Cell, Cylinder and Panel modules for installation in Make-Up Air Units, Air Handling Units and Camfil's PSSA Housings. These products are all part of Camfil's CamCarb product range.
- For heavy duty applications, CamPure media can be supplied in Deep Bed Filters. This product is part of Camfil's ProCarb product range.

Refer specific product catalog for detailed performance specification or contact Camfil for more information.

#### Handling and Disposal

SDS for this product is available upon request.

Spent CamPure media must be disposed of in a responsible manner and in accordance with all site, local and national regulations relevant to the point of use.