



**MILLERS AND PROCESSORS OF BASE MINERALS**

**Date:** 16 May 2019  
**Approved by:** E. Wenger  
**Compiled by:** D. Prevoo

**Pages:** 1 of 2  
**Doc No:** DS074  
**Rev No:** 01



**DATA SHEET**

<b>PRODUCT NAME HERE</b>
Grade: ActiDesolidex
Use: Industrial suspended solids removal, organic and inorganic.

**Chemical Analysis (%):**

<b>SiO<sub>2</sub></b>	72%	<b>Fe<sub>2</sub>O<sub>3</sub></b>	0.6%
<b>Na<sub>2</sub>O</b>	14%	<b>K<sub>2</sub>O</b>	0.06%
<b>CaO</b>	9%	<b>Al<sub>2</sub>O<sub>3</sub></b>	0.3%
<b>MgO</b>	4%		

**Physical Properties:**

<b>Colour:</b>	White	<b>Bed Depth:</b>	600-800mm small fraction only, with suitable nozzle arrangement and aperture. Depending on suspended solids characteristics/origin.
<b>Backwash Rate:</b>	Max. 6-10 m <sup>3</sup> /m <sup>2</sup> /h at max. 100-120 kPa		Add 100mm of larger fraction (underbedding) to 500mm of smaller fraction with larger nozzle aperture
<b>Dry Bulk Density:</b>	1.3	<b>Free Board:</b>	40-50% of media bed depth
<b>Effective Size mm(Approx) :</b>	0.6 - 0.65 D10 -1.1mm	<b>Service Flow Rate in Cubes per hour:</b>	8-12m <sup>3</sup> /m <sup>2</sup> /h at 100-120 kPa Depending on suspended solids (SS) characteristics/origin.
<b>Uniformity Coefficient:</b>	1.4 - 1.65	<b>Shape:</b>	Smooth and Angular
<b>Mesh Size</b>	-1.4+0.4mm	<b>Attritional loss per annum:</b>	5-6% depending on backwash frequency.
<b>Specific Gravity:</b>	2.43		

**Application:**

<b>Flocculated Pool Water with 92 NTU Turbidity:</b>	88% reduction with single pass 95% reduction with double pass 98% reduction with triple pass
<b>Flocculated Pool water with 87mg/l total suspended solids:</b>	85% reduction with single pass 94% reduction with double pass 98% reduction with triple pass
<b>Organic suspended solids resulting from biological treatment, ie COD reduction: 11m/hr</b>	91% reduction with single pass at 20m/h velocity 98% reduction with single pass at 10m/h velocity
<b>TSS Inorganic:</b>	82% Efficiency on first pass.
<b>Turbidity Inorganic:</b>	81% at 11m <sup>3</sup> /m <sup>2</sup> /h at max 100 kPa

\*The information and recommendations in this product data sheet are based on data we believe to be reliable. They are offered in good faith, but do not imply any warranty or performance guarantee, as conditions and methods of use of our products are beyond our control. As such, African Pegmatite Company South Africa makes no express or implied warranties of any kind with respect to this product, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. We recommend that the user determine whether the products and the information given are appropriate, and that the suitability and performance of our products are appropriate by testing with its own equipment. Specifications are subject to change without notice. The information and recommendations given in this product data sheet should not be understood as a recommendation for the use of our products in violation of any patent or as a license to use any patents of the African Pegmatite Company South Africa.

**MILLERS AND PROCESSORS OF BASE MINERALS**

**Date:** 16 May 2019  
**Approved by:** E. Wenger  
**Compiled by:** D. Prevo

**Pages:** 2 of 2  
**Doc No:** DS074  
**Rev No:** 01

**Notes:**

- It is sanitised in a furnace to make it completely safe during the activation process.
  - It is sourced 100% locally
  - It is highly efficient in removal of flocculated suspended solids in a single pass application as well as multi pass.
  - It can be used for industrial suspended solids removal, for both organic and inorganic.
  - The small size fraction can be used on its own, but in vessels with larger nozzle apertures the larger fraction can be used as underbedding
  - Due to its lower bulk density, a material saving of 20% is achieved, compared to silica medium.
  - Due to the smooth but activated particle surface, entrained suspended solid particles are virtually instantly removed from the particle surface during backwash, resulting in drastically reduced backwash cycles and water savings of 75-80%
  - Drastically reduced filtration cycles in multi pass applications result in substantial power savings.
  - It is suitable for liquid/suspension filtration applications in a wide pH range, typically 3-13.
  - Operating parameters and filtration efficiencies as contained in this data sheet have been obtained by extensive testing in representative applications- test parameters are based on proven and acknowledged techniques as regards filtration area , medium bed depth, filtration pressure and velocities.
- ActiDesolidex tests, in parallel with alternative/imported products, have shown ActiDesolidex to be substantially superior.

\*The information and recommendations in this product data sheet are based on data we believe to be reliable. They are offered in good faith, but do not imply any warranty or performance guarantee, as conditions and methods of use of our products are beyond our control. As such, African Pegmatite Company South Africa makes no express or implied warranties of any kind with respect to this product, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. We recommend that the user determine whether the products and the information given are appropriate, and that the suitability and performance of our products are appropriate by testing with its own equipment. Specifications are subject to change without notice. The information and recommendations given in this product data sheet should not be understood as a recommendation for the use of our products in violation of any patent or as a license to use any patents of the African Pegmatite Company South Africa.