

HS-Clean Pro for odour & gasfiltration (chemisorption)



HS-Clean Pro is a chemisorptive granulate which serves as replacement or as addition to HS-Activated Carbon. HS-Clean Pro offers favourable adsorption abilities against various organic gases. We recommend its use in addition to activated carbon at processes where H₂S, SO₂ or other organic / smell intensive agents, i.e. aminoacids or formaldehyde must be removed from the air flow.

HS-Clean Pro is manufactured from high porosity activated alumina granules which are impregnated with potassium permanganate (KMNO₄). The potassium permanganate serves as oxidizing agent to destroy, inactivate or converse the problematic gases and odours. It is not combustible and thus fulfills UL class 1.

HS-Clean Pro will change color by onwardly chemisorption / oxidation from purple (fresh media) to brown and black (used media).



Gaseous air impurity	formular	capacity HS-Clean Pro	capacity HS-Clean Pro II
Formaldehyde	CH ₂ O	1,4 %	2,5 %
Hydrogen sulfide	H ₂ S	8,0 %	14,0 %
Nitric oxides	div.	2,8 %	4,9 %
Sulphur dioxide	SO ₂	4,0 %	7,0 %
Ethylene	C ₂ H ₄	1,0 %	1,75 %

Upon request we will send you performance and capacity data for other gases, agents, odours etc. The capacity in [%] determines the possible weight relative adsorption / chemisorption capacity.

The air flow should be adjusted to the applications requirement. We recommend an air velocity of 0,3 - 2,5 [m/s].

Examples	<ul style="list-style-type: none">▪ 100 kg HS-Clean Pro binds appx. 8 kg H₂S▪ 200 kg HS-Clean Pro II binds appx.14 kg SO₂.
Variants	HS-Clean Prois available with different grades of KMNO ₄ impregnations: <ul style="list-style-type: none">▪ HS-Clean Pro with 4 % KMNO₄ impregnation▪ HS-Clean Pro II with 8 % KMNO₄ impregnation▪ HS-Clean Pro III with 12 % KMNO₄ impregnation exclusive media for special tasks
Operational conditions	<ul style="list-style-type: none">▪ rel. h. 10 [%] - 95 [%]▪ temperature range -20[°C] to 51 [°C]
Applications	<ul style="list-style-type: none">▪ HS-AKP 26 (cartridge filter filling)▪ HS-A053 (replaceable filterbed cell)▪ HS-Securesorb (deep bed filter system)▪ HS-Combicel▪ HS-Carbopad