

S.C.A.T. Active Carbon 2.0

Adsorption Table



The following list offers a reference for the adsorption ability of active carbon granulate w.r.t. gaseous impurities in the air. This ability to adsorb is influenced by the following factors:

- Concentration of impurities in the air
- Relative humidity
- Temperature
- Average flowrate (through it)
- Grain size of the active carbon
- Diffusion coefficient of all the adsorbing materials
- Pore size of the active carbon

The evaluation of the adsorption ability is only realistically possible if liquid and solid impurities are first removed, using suitable pre-filters. Average values and prevailing conditions are here assumed to prevail.



Meaning of the Evaluations

Adsorption Ability	Meaning
A	High adsorption ability: 1 kg of active carbon can adsorb between 20 and 30% of its own weight.
B	Satisfactory adsorption ability: the adsorbing capacity for materials of this class lies between 10 and 20%.
C	Limited adsorption ability: the adsorbing capacity is slight, but is still acceptable under certain conditions.
D	Slight adsorption ability: the ability to adsorb is so very reduced for these materials, that active carbon should not be employed.

Chemical / Material	Adsorption Ability	Chemical / Material	Adsorption Ability	Chemical / Material	Adsorption Ability
Acetaldehyde	C	Amyl ether	A	Butyraldehyde	B
Acetic acid	A	Anesthetics	B	Butadiene	B
Acetic anhydride	A	Aniline	A	Butane	C
Acetone	B	Animal odors	B	Butanone	C
Acetylene	D	Antiseptics	A	Butyl acetate	A
Acids	B	Asphalt fumes	A	Butyl alcohol	A
Acrolein	B	Automobile exhaust	B	Butyl cellosolve	A
Acrylic acid	A	Bacteria	B	Butyl chloride	A
Acrylonitrile	A	Bathroom smells	A	Butyl ether	A
Adhesives	A	Benzene	A	Butylene	C
Alcohol	A	Bleaching solutions	B	Butyne	C
Alcoholic beverages	A	Body odors	A	Butyric acid	A
Amines	C	Bromine	A	Camphor	A
Ammonia	C	Burned fat	A	Cancer odor	A
Amyl acetate	A	Burned flesh	A	Caprylic acid	A
Amyl alcohol	A	Burned food	A	Carbolic acid	A

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Bank Account

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BLZ: 501 900 00
No.: 6101 539 146

Legal Information

Registered Office: 64546 Mörfelden-Walldorf
District Court: Darmstadt
Comm. Register: HRB 55045
Managing Director: Peter Rebehn
VAT-ID-No.: DE 227617033



Chemical / Material	Adsorptional Ability	Chemical / Material	Adsorptional Ability	Chemical / Material	Adsorptional Ability
Carbon bisulfide	C	Dichlorobenzene	A	Ethylene oxide	B
Carbon dioxide	D	Dichlorodifluoromethane	B	Eucalyptole	A
Carbon monoxide	D	Dichloroethane	A	Exhaust fumes	B
Carbon tetrachloride	A	Dichloroethyl ether	A	Female odors	A
Cellosolve	A	Dichloroethylene	A	Fertilizer	A
Cellosolve acetate	A	Dichloromonofluoromethane	A	Film processing odors	B
Charred materials	A	Dichloronitroethane	A	Floral scents	A
Cheese	A	Dichloropropane	A	Fluorotrichloromethane	B
Chemicals	B	Dichlorotetrafluoroethane	B	Food aromas	A
Chlorine	C	Diesel fumes	B	Formaldehyde	C
Chloronitropropane	A	Diethylamine	B	Formic acid	B
Chlorobenzene	A	Diethylketone	A	Fuel gases	C
Chlorobutadiene	A	Dimethylaniline	A	Fumes	B
Chloroform	A	Dimethylsulfate	A	Gangrene	A
Chloropicrin	A	Dioxane	A	Garlic	A
Cigarette smoke	A	Dipropylketone	A	Gasoline	A
Citrus and other fruits	A	Dish odors	A	Heptane	A
Cleaning compounds	A	Disinfectants	A	Heptene	A
Coal smoke	B	Embalming odors	A	Hexane	B
Combustion odors	B	Essential oils	A	Hexenes	B
Cooking odors	A	Ethane	D	Hexynes	B
Corrosive gases	C	Ether	B	Hospital odors	A
Creosote	A	Ethyl acetate	A	Household smells	A
Cresols	A	Ethyl acrylate	A	Hydrogen	D
Crotonaldehyde	A	Ethyl alcohol	A	Hydrogen chloride	C
Cyclohexane	A	Ethylamine	B	Hydrogen cyanide	C
Cyclohexanol	A	Ethyl benzene	A	Hydrogen fluoride	C
Cyclohexanone	A	Ethyl bromide	B	Hydrogen iodide	C
Cyclohexene	A	Ethyl chloride	B	Hydrogen selenide	C
Dead animals	A	Ethyl ether	B	Hydrogen sulfide	C
Decane	A	Ethyl formate	B	Hydrogen bromide	C
Decaying substances	A	Ethyl mercaptan	A	Incense	A
Decomposition odors	A	Ethyl silicate	A	Incomplete combustion	B
Deodorants	A	Ethylene	D	Indole	A
Detergents	A	Ethylene chlorhydrin	A	Industrial wastes	B
Dibromoethane	A	Ethylene dichloride	A	Inorganic chemicals	B

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Iodine	A	Methylal	B	Paste and glue	A
Iodoform	A	Methylcyclohexane	A	Pentane	B
Irritants	A	Methylcyclohexanol	A	Pentanone	A
Isophorone	A	Methylcyclohexanone	A	Pentylene	B
Isoprene	B	Methylene chloride	A	Pentyne	B
Isopropyl acetate	A	Mildew	B	Perchloroethylene	A
Isopropyl alcohol	A	Mixed odors	A	Perfumes, cosmetics	A
Isopropyl ether	A	Mold	B	Perspiration	A
Kerosene	A	Monochlorobenzene	A	Pet odors	A
Kitchen odors	A	Monofluorotrchloromethane	B	Phenol	A
Lactic acid	A	Moth balls	A	Phosgene	B
Lingering odors	A	Naphtha (Coal tar)	A	Pitch	A
Liquid fuels	A	Naphtha (Petroleum)	A	Plastics	A
Liquor odors	A	Naphthalene	A	Poisonous gases	B
Lubricating oils and greases	A	Nicotine	A	Pollen	B
Masking agents	A	Nitrobenzene	A	Popcorn and candy	A
Medicinal odors	A	Nitric acid	B	Poultry odors	A
Melons	A	Nitroethane	A	Propane	C
Menthol	A	Nitrogen dioxide	C	Propionic acid	A
Mercaptans	A	Nitroglycerine	A	Propionaldehyde	B
Mesityl oxide	A	Nitromethane	A	Propyl alcohol	A
Methane	D	Nitropropane	A	Propyl acetate	A
Methyl acetate	B	Nitrotoluene	A	Propyl chloride	A
Methyl acrylate	A	Nonane	A	Propyl ether	A
Methyl alcohol	B	Noxious gases	B	Propyl mercaptan	A
Methyl bromide	B	Octalene	A	Propylene	C
Methyl butyl ketone	A	Octane	A	Propyne	C
Methyl cellosolve	A	Odorants	A	Putrefying substances	B
Methyl cellosolve acetate	A	Odors	A	Pyridine	A
Methyl chloride	C	Onions	A	Radioactive products	C
Methyl chloroform	A	Organic chemicals	A	Rancid oils	A
Methyl ether	B	Ozone	A	Reodorants	A
Methyl ethyl ketone	A	Packing house odors	A	Resins	A
Methyl formate	B	Paint and redecorating odors		Ripening fruits	A
Methyl isobutyl ketone	A	Palmitic acid	A	Rotting paper	A
Methyl mercaptan	A	Paradichlorbenzene	A	Rubber	A

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Chemical / Material	Adsorptional Ability
Sauerkraut	A
Sewer odors	A
Skatole	A
Slaughterhouse odors	B
Smog	A
Smoke	A
Soaps	A
Solvents	B
Sour milk	A
Spilled beverages	A
Spoiled food stuffs	A
Stale odors	A
Stoddard Solvent	A
Stuffiness	A
Styrene monomer	A
Sulfur compounds	A
Sulfur dioxide	C
Sulfur trioxide	C
Sulfuric acid	A
Tar	A
Tetrachloroethane	A
Tetrachloroethylene	A
Tetrahydrofuran (THF)	A
Theatrical makeup odors	A
Tobacco smoke	A
Toilet odors	A
Toluene	A
Toluidine	A
Trichlorethylene	A
Turpentine	A
Urea	A
Uric acid	A
Valeric acid	A
Valeric aldehyde	A
Vapors	A
Varnish fumes	A

Chemical / Material	Adsorptional Ability
Vinegar	A
Vinyl chloride	B
Viruses	B
Volatile materials	B
Waste products	A
Wood alcohol	B
Xylene	A

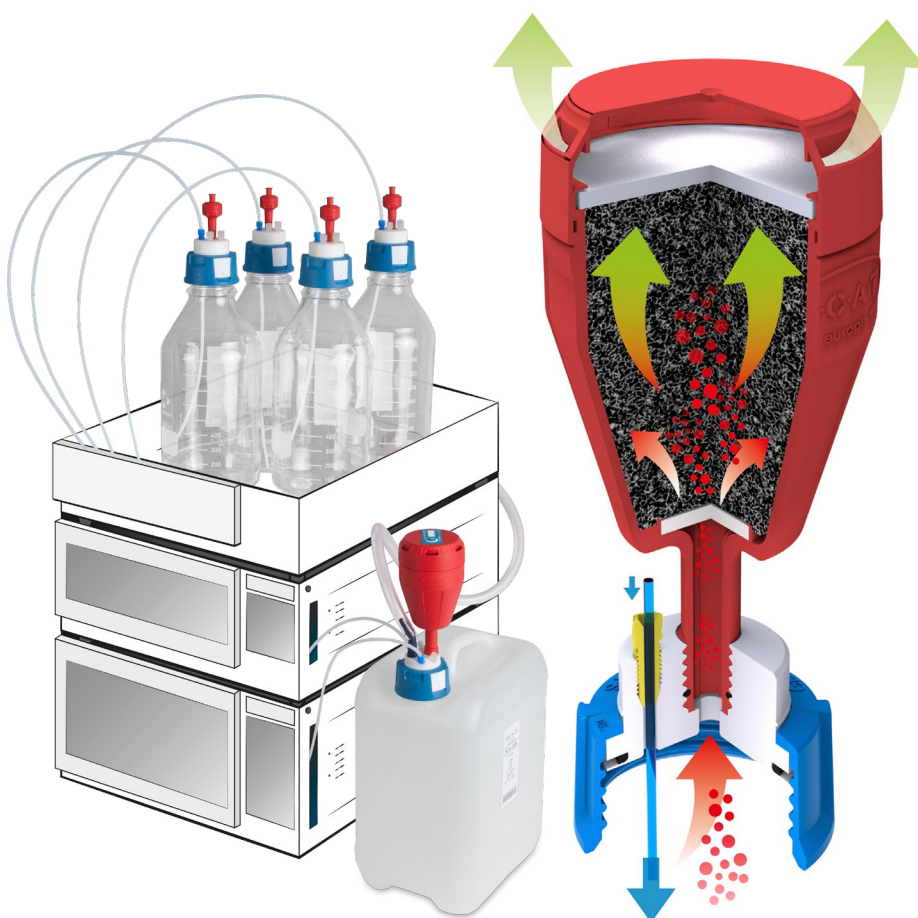
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S.C.A.T. active carbon has been optimized for the adsorption of organic solvent vapours in the field of HPLC / UHPLC.

It has been tested according to official DIN / ISO / ASTM norms, and is especially manufactured for this purpose.

The S.C.A.T. system protects health and the environment, and safeguards the quality of your analytical work. Discover more at:

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