

# ACTIVATED CARBON FOR MEDICINAL AND NUTRACEUTICAL CAPSULES AND TABLETS

## Benefits

- ◆ Meets US and European Pharmacopeia specifications, making the products fit for human ingestion
- ◆ High microporosity for effective treatment of gastro-intestinal ailments such as gas, bloating and diarrhea
- ◆ Stringent microbial limits and heavy metals specifications, ensuring very high safety standards
- ◆ NORIT® B TEST USP activated carbon has very narrow particle density control limits, enabling placement of 280 mg of activated carbon in a size zero capsule
- ◆ NORIT B TEST USP activated carbon has supply chain compliance with US FDA Food Safety Modernization Act

## Challenge and solution

Activated carbon, also known as activated charcoal, is a highly porous carbonaceous material made from natural raw materials like wood, peat or coconut shells. Due to its high degree of microporosity, just one gram of activated carbon can have a surface area of > 2000 m<sup>2</sup>/gram, making it highly effective for treating diarrhea, gas and bloating.

Gas and bloating	Our activated carbon adsorbs gas and gas-producing substances that are a natural by-product of digestion.
Diarrhea	Our activated carbon adsorbs the poisonous substances from the digestive tract, thereby addressing the root cause of diarrhea.

In fact, activated carbon is listed on the World Health Organization's (WHO) Model List of Essential Medicines as an antidote for non-specific poisonings.

We manufacture unique activated carbon products with superior adsorptive power by optimizing the porosity of our activated carbon particles. The result is a natural product that is highly effective for binding toxins in the gastro-intestinal tract, making it ideal for treating these common ailments.



**Products**

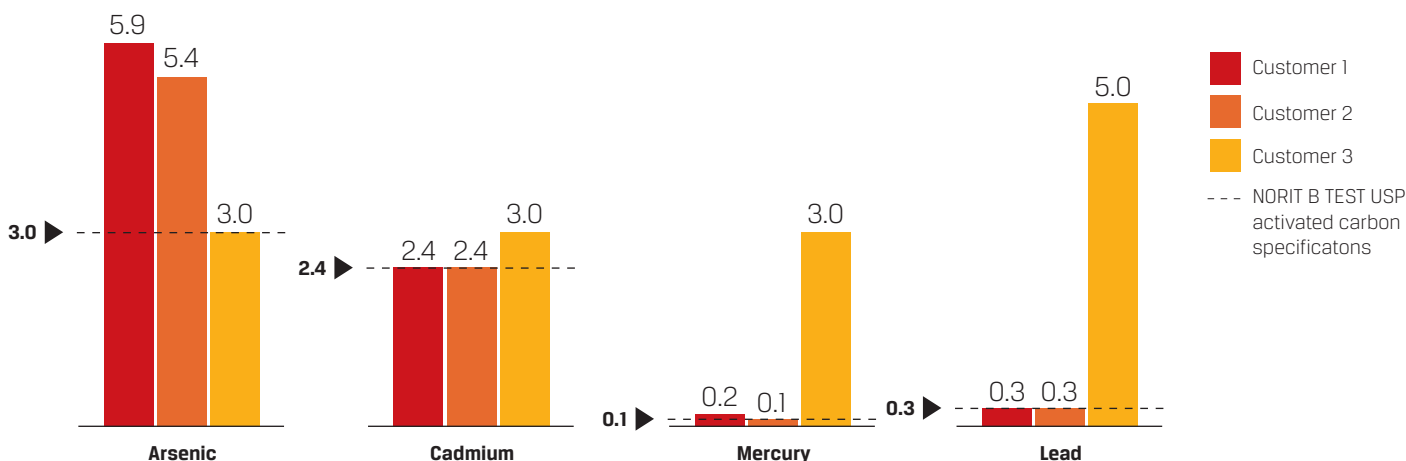
We offer activated carbon grades for use in capsules and tablets that are sold as Active Pharmaceutical Ingredients (API) in Europe and as over-the-counter nutraceuticals in the rest in the world. Our newest product, NORIT® B TEST USP activated carbon, is the leading grade for use in capsules in North America, given its tight apparent density and compliance with the US FDA Food Safety Modernization Act (FSMA).

Region	Product	Capsules	Tablets	Density specification	Density range	
					kg/m <sup>3</sup>	lb/ft <sup>3</sup>
North America	NORIT B TEST USP <sup>*)</sup>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	470-510	29.3-31.8
	NORIT E SUPRA USP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	285-310	17.8-19.4
Rest of world	NORIT B TEST EUR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	415-495	25.9-30.9
	NORIT B SUPRA EUR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	370-400	23.1-25.0

<sup>\*)</sup> Complies with US FDA Food Safety Modernization Act

NORIT activated carbon grades meet stringent US Pharmacopeia requirements for microbial limits and metals. NORIT B TEST USP activated carbon meets the most stringent customer-specific metals requirements of leading nutraceutical companies, which are even lower than US Pharmacopeia requirements.

**Heavy metals requirements (ppm)**



For many years, we have been the leading supplier of activated carbon based API for capsules and tablets used to treat gastro-intestinal ailments. These products are made at our state-of-the-art cGMP-certified pharmaceutical facility in the Netherlands. We leverage this experience in offering high quality, high purity activated carbons in compliance with both the US and European Pharmacopeia.

Our sales, technical service and customer service teams are prepared to serve customers around the world. Contact us at [cabotcorp.com/activatedcarboncontact](http://cabotcorp.com/activatedcarboncontact)



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