



# TECHNICAL DATASHEET

## ColorSorb® HPX-N

### Highly versatile activated carbon for purification duties

ColorSorb® HPX-N is a specially prepared activated carbon that combines highly effective treatment of moderately discolored liquids, food stuffs and chemicals, with an enhanced ability to remove low molecular weight compounds. This material has a predominately macroporous structure for efficient adsorption of high molecular weight organic substances in liquid phase decolorization applications. The presence of a microporous structure allows trace organic removal, including compounds associated with aging, such as hydroxy-methyl fufural (HMF).



#### SPECIFICATION\*

Iodine number	min. 950 mg/g
Molasses number (EU)	max. 150
Total ash content	max. 6 %
Moisture content	max. 10 %
pH	4.5 - 7.0
Acid soluble iron content	400 ppm

#### TYPICAL PROPERTIES\*

Methylene blue index	240 mg/g
Surface Area (BET)	1200 m <sup>2</sup> /g
Iodine number	1000 mg/g
Water soluble ash	1.5%
Lead content	2 ppm
Arsenic content	0.5 ppm
Zinc content	1 ppm

\* SPECIFICATIONS AND TYPICAL PROPERTIES ARE PRODUCED USING JACOBI CARBONS' TEST METHODS. THEY ARE LISTED FOR INFORMATIONAL PURPOSES ONLY AND NOT TO BE USED AS PURCHASE SPECIFICATIONS. SALES SPECIFICATIONS CAN BE OBTAINED FROM YOUR JACOBI CARBONS TECHNICAL SALES REPRESENTATIVE AND SHOULD BE REVIEWED BEFORE PLACING AN ORDER.

#### Features and Benefits

- Good decolor efficiency
- Semi-acidic pH range
- Sustainable raw material
- Rapid adsorption kinetics
- Range of particle sizes
- Quick dispersion in liquids
- Food codex compliant
- Homogenous product

#### Available Particle Sizes

- PAC-C < 45% < 325 mesh
- PAC-S 55-70% < 325 mesh
- PAC-F > 90% < 325 mesh

#### Approvals and Certifications

- Food Chemicals Codex
- Halal certified
- Kosher certified

#### Standard Packaging

- 15 kg multi-wall paper sack (33lb)
- 300 kg bulk bag (660 lb)
- Other packing considered on request



Robust multi-wall paper sacks with integral bonded plastic layer within the sack construction ensures durability in transit. Sacks stowed on pallets and wrapped to ensure easy handling.



## PARTICLE SIZE DISTRIBUTIONS

US mesh size	PAC-C	PAC-S	PAC-F
>80	<0.5%	0%	0%
<100	>90.0%	>95%	>99.5%
<200	55-70%	>85%	>95%
<325	<45%	65-85%	>90%
d <sub>50</sub>	>35µm	15-35µm	8-15µm

OTHER PARTICLE SIZE DISTRIBUTIONS ARE AVAILABLE ON REQUEST, INCLUDING MICRONISED AND HIGH FILTERABILITY PRODUCTS TO SUIT ALL FILTRATION NEEDS.

## BURNING AND EXPLOSION CHARACTERISTICS

Auto-ignition temperature	410 °C	
Smolder temperature	No smoldering up to 400 °C	
Dust explosion class	St1 (weak explosion potential)	
TGA/TDA under air	307°C (medium reactivity)	
Minimum ignition energy	> 1200mj	
Minimum ignition temperature	>740°C	
Lower explosion limit	>60g/m <sup>3</sup>	
Explosion severity (20l sphere)	P max.	6.3 bar
	MRE (ΔP)	175 bar/s
	Kmax or Kst	85 bar/m/s

DATA PROVIDED IS INDICATIVE ONLY AND BASED ON THE ANALYSIS OF MATERIAL UNDER SPECIFIC CONDITIONS. THESE MAY NOT BE REPRESENTATIVE OF PREVAILING CIRCUMSTANCES DURING THE HANDLING AND USE OF THIS ACTIVATED CARBON GRADE.

## PRODUCTION CAPABILITY

The Jacobi Carbons Group of companies owns and operates manufacturing facilities in nine countries around the world. We produce in excess of 70,000 metric tonnes of high quality activated carbons based on coconut shell, coal and wood, by both chemical and steam (physical) activation methods. Our facilities are state-of-the-art, and are the most modern production units of their type. Intensive investment in these has ensured that products are manufactured to the most exacting quality standards demanded by our customers.

## TECHNICAL SUPPORT AND KNOW-HOW

One of the distinguishing features of Jacobi Carbons is the extremely high level of technical competence within the company. Stand-alone product and technical service departments are staffed by industry-leading specialists in the field of activated carbon application and research. Dedicated laboratory facilities in Europe and North America work with our clients to ensure the optimum result is achieved from the use of our activated carbon products.

For more information or to contact Jacobi visit: [www.jacobi.net](http://www.jacobi.net)



**NOTICE** Due to the progressive nature of the Jacobi Carbons Group and the continually improving design and performance of our products, we reserve the right to change product specifications without prior notification. The information contained in this datasheet is intended to assist a customer in the evaluation and selection of products supplied by Jacobi Carbons. The customer is responsible for determining whether products and the information contained in this document are appropriate for customer's use. Jacobi Carbons assumes no obligation or liability for the usage of the information in this datasheet, no guarantees or warranties, expressed or implied, are provided. Jacobi Carbons disclaims responsibility and the user must accept full responsibility for performance of systems based on this data.

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**Jacobi**  
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