

MWV Specialty Chemicals

Pelletized Activated Carbon (Trade Names – BAX LBE, BAX 950, BAX 1100, BAX 1500, BX 7530, BX 7540, WV-IS XL)

I. Introduction:

MWV [activated carbon products](#) are derived from wood — assuring greater purity and superior performance through higher surface area and pore volume per gram than other raw material alternatives. MWV operates wood-based activated carbon plants in Covington, Virginia, U.S. and Wickliffe, Kentucky, U.S. to provide customers around the world with a dependable product supply.

II. Chemical Identity:

Activated Carbon, CAS 7440-44-0

III. Uses:

MWV Nuchar® pelletized activated carbon provides lower pressure drop than granular activated carbon in fixed-bed purification of gases and vapors. Applications include gasoline vapor recovery for automotive applications, solvent recovery, air purification, odor control, catalysis and removal of corrosive gases. MWV pelletized activated carbons are extremely hard, durable, and low in dust content. They are particularly well suited for recovery of solvents and for evaporative emissions controls. The pellets are available in different diameters and chemistries to meet a variety of application requirements.

Automotive – MWV Specialty Chemicals is the leading, worldwide resource for activated carbon products used in evaporative emission control systems for the automotive industry. For over 35 years, our development, testing and research have continuously improved activated carbon products used to control automobile emissions. We manufacture a wide range of Nuchar granular activated carbons specifically designed for gasoline vapor recovery. Customers can select activated carbon products with the proven physical properties and design flexibility needed to achieve optimum performance in their own canister systems. The features and benefits of MWV granular automotive carbons include the highest working capacity, low density, low flow restriction, low diurnal emissions, and superior durability.

Solvent Recovery, Air Purification, Acid Gas-Odor Control – MWV pelletized carbons are used for the control of organic pollutants in a variety of off-gas applications for environmental purposes. They are particularly well suited for use in solvent recovery systems where cyclohexanone is the solvent, and in systems with other solvents that see traces of heavy components that shorten the bed life of other types of carbons. They are also used to purify many types of industrial and hydrocarbon gases in fixed beds or pressure swing adsorption applications such as natural gas purification and helium

recovery. Nuchar® WV-IS XL activated carbon is used for the reduction of trace acid gases such as chlorine and hydrogen sulfide in certain industries and for removing H₂S odors in sewage gases.

Other Uses - Catalysis/Catalyst support

IV. Physical/chemical properties:

Black solid pellets

Odorless

Consult the specific material safety data sheet and product data bulletin for more details or contact the company directly for more information.

V. Health Effects:

Always refer to the specific MSDS for detailed information on safety. Never enter a confined space containing wet, activated carbon. Wet, activated carbon will adsorb oxygen and asphyxiation may result.

This material is not a skin irritant, eye irritant, or corrosive agent although it is considered a nuisance particulate and exposure can be irritating.

VI. Environmental Effects:

Always refer to the specific MSDS for more detailed information.

There are no known significant environmental effects or critical hazards from MWV activated carbon products. The product itself and its products of degradation are not toxic.

VII. Exposure and Risk Management Recommendations:

Always refer to the specific MSDS for detailed information on exposure and first aid measures.

Workplace – Possible routes of entry – eye contact, dermal contact, inhalation

Consult with the current guidelines for exposure limits for nuisance particulates and in some cases, phosphoric acid.

Keep containers tightly closed and in a cool, well-ventilated area.

Avoid creating dusty conditions.

Consumer use – Consumer use and exposure should be negligible.

Environment - The generation of waste should be avoided or minimized wherever possible. The most likely affected media in release scenarios would be to air, ground, or water. Clean-up efforts should avoid dispersal of spilled material and runoff onto soil, waterways, drains, and sewers. If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for proper disposal in a manner compliant with all applicable regulatory requirements.

VIII. Agency Review:

The US facilities that produce these products are ISO/TS 16949, ISO/RC 14001, Kosher, and Halal certified. The China manufacturing facility is ISO 9001 and Kosher certified.

IX. Regulatory Compliance:

SARA 302/304: Not applicable

SARA 311/312: Carbon is an acute health hazard

CERCLA: In some cases, products contain phosphoric acid (RQ=5000 lbs)

PA, MA, NJ RTK: In some cases, products contain phosphoric acid

CA P65: No significant risks under conditions of normal use

WHMIS - Not controlled

Canada - DSL listed

Europe - EINECS listed

Australia – AICS listed

China – IECSC listed

South Korea – ECL listed

Phillipines – PICCS listed

Switzerland - acceptable

US - TSCA inventory listed

Japan – ENCS and MITI listed

Not hazardous for shipment per DOT, IATA, IMDS classification criteria

X. Conclusion:

No warranties of use or otherwise are expressly made or implied from this information. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown hazards and should be used with caution.

X. Contact Information:

covCDP@mwv.com or carbon@mwv.com

Date: September 17, 2009

Revision 0