

V-Grid Biochar Uses - Animal Feed



**BIOCHAR
LIVESTOCK
APPLICATIONS**

Biochar used in the livestock/animal industry is primarily used to bind toxins in the gastrointestinal tract of animals. Can also be used to absorb ammonia, volatiles in animal feces, bedding thereby reducing greenhouse gases and odor.



APPLICATION	IN USE TODAY	IN TRIALS	IN DEVELOPMENT	FUTURE
Dairy Calf Powder	Approved in California	XX		
Dairy Calf transition		XX		
Adult cow methane reduction, feed efficiency		XX		
Poultry Bedding			XX	
Goats, pigs, sheep				XX

VGRID BIOCHAR PARTICAL SIZES	TYPICAL USES
PARTICLE SIZE - STANDARD VGRID BIOCHAR	ANIMAL BEDDING (Bedding helps to absorb ammonia, volatiles in animal feces, thereby reducing greenhouse gases and odor.)
PARTICLE SIZE - FINE VGRID BIOCHAR	Some types of Animal Bedding & Feed Supplement
PARTICLE SIZE - ULTRA FINE VGRID BIOCHAR	MOSTLY USED IN LIVESTOCK/ANIMAL FEED SUPPLEMENT (bind toxins in the gastrointestinal tract to improve animal digestion, performance, and feed efficiency)

PARTICLE SIZE STANDARD - VGRID BIOCHAR

ITEM	TYPICAL MAKE UP	GUARANTEED MAKE UP	COMMENTS
Starting Material	Non-treated wood pellets or Pistaccio shells		
Ash Content	<5%		
Moisture Content, as packed	<5%		Some variation can occur in shipping
Particle Size	less than 1/2" irregular		
Surface Area	200+/- 100 m2/g		
Total Pore Volume	0.17 cc/g		
Iodine Number, mg/g	>1100		
Tap Density, Dry g/ml	0.35		
Hardness	85-95	Min 85	
Heavy Metals			
Bulk Density	.42 g/cm3		
Solubility in Water	Not soluble		
pH	6 to 10		
Melting Point	3500 C		

PARTICLE SIZE FINE - VGRID BIOCHAR

ITEM	TYPICAL MAKE UP	GUARANTEED MAKE UP	COMMENTS
Starting Material	Non-treated wood pellets or Pistaccio shells		
Ash Content	<5%		
Moisture Content, as packed	<5%		
Particle Size (D50 microns)	3x24 mesh		
Surface Area	200+/- 100 m2/g		
Total Pore Volume	0.17 cc/g		
Iodine Number, mg/g	>1100		
Tap Density, Dry g/ml	0.35		
Hardness	85-95 estimate		
Heavy Metals			
Bulk Density	.42 g/cm3		
Solubility in Water	Not soluble		
pH	6 to 10		
Melting Point	3500 C		

PARTICLE SIZE **ULTRA FINE** - VGRID BIOCHAR

ITEM	TYPICAL MAKE UP	GUARANTEED MAKE UP
Starting Material	Non-treated wood pellets or Pistaccio shells	
Ash Content	<5%	
Moisture Content, as packed	<5%	
Particle Size (D50 microns)	3x24 mesh	Less than 0.0001 % of material will be larger than mesh size
Surface Area	200+/- 100 m2/g	
Total Pore Volume	0.17 cc/g	
Iodine Number, mg/g	>1100	
Tap Density, Dry g/ml	0.35	
Hardness	85-95 estimate	
Heavy Metals		
Bulk Density		.42 g/cm3
Solubility in Water		Not soluble
pH		6 to 10
Melting Point		3500 C