

V-Grid Biochar Uses - Animal Feed



BIOCHAR LIVESTOCK APPLICATIONS

Biochar is used in the livestock feed industry primarily to increase growth & provide better feed efficiency of animals. It can also be used in bedding and pits to decrease ammonia, adsorb moisture and reduce odor for a healthier environment for animals and people.

**CALIFORNIA DEPT
FOOD & AG
APPROVED!**

APPLICATION	IN USE TODAY	IN TRIALS	IN DEVELOPMENT	FUTURE
Dairy Calves	X	X		
Dairy Cow Transition		XX		
Cow Methane Reduction		XX		
Beef Feedlot			XX	
Poultry, Pig, Equine Bedding	XX			
Nursery Pigs		XX		
Poultry Feed				XX

VGRID BIOCHAR PARTICAL SIZES	TYPICAL USES
PARTICLE SIZE - STANDARD VGRID BIOCHAR	ANIMAL BEDDING AND PITS (decrease ammonia, adsorb moisture and reduce odor for a healthier environment for animals and people and 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 (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