

COLORED SHEET CHARACTERISTICS

Glycine (4)

Phenylalanine - Aromatic Class (1)

Valine - Aliphatic Class (1)

Threonine- Aliphatic Class (0)

Tryptophan: Heterocyclic Class (2)

Isoleucine - Aliphatic Class (1)

Methionine: Sulfur Containing (4)

Histidine- Basic Class (0)

Arginine: Basic Class (1)

Lysine: Basic Class(3)

Leucine: Aliphatic Class (1)

Simplest Amino Acid	Unique Components of Amino Acids	Carboxyl Group	Amino Group (NH₂) on the C atom adjacent to Carboxyl group
NH₂ designated Alpha-Amino Group	Cyclic Ring		In Most species adults do not require this
Branched-Chain Amino Acid	Low in Corn	Deficiency = Eye Cataracts	Branched-Chain Amino Acid
Sulfur containing	Important in Ruminant	In some cases First Limiting - Swine Growth	Can be replaced partially by Cystine, Important in Poultry
Branched-Chain Amino Acid; Help regulate glucose uptake by cells	Low in Corn	First limiting in Swine and humans	Reduced growth rate and lean tissue deposition in swine