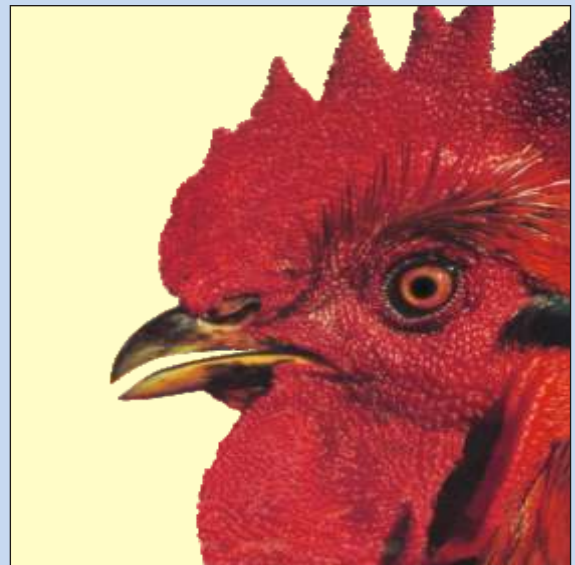




PRICHEMIN



FAMIQS



PRIYA CHEMICALS

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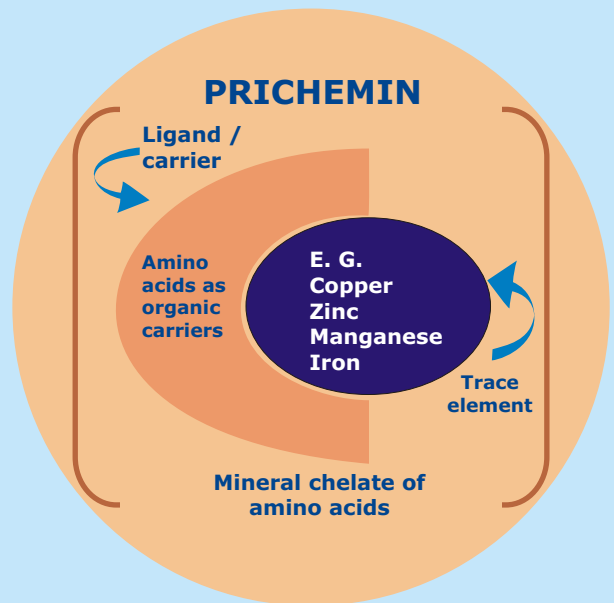
PRICHEMIN

Minerals play an important role in regular dietary requirements of animal feed and are essential for growth, reproduction and milk production. Essential minerals are destroyed during the digestion process due to interactions with other components of feed.

Use of Organic Trace Minerals in the feed is the optimal way to ensure protection and absorption of minerals through the intestinal walls into the blood stream and reaching various organs to perform various physiological functions without interruption.

To meet these requirements Priya Chemicals has developed PRICHEMIN (Chelated Minerals of Amino Acids), with patented technology meeting standards of EU and AAFCO.

PRICHEMIN is prime in quality and absorption and is absorbed faster than ordinary salts of minerals. This chelate also meets Amino Acids requirement in the diet.

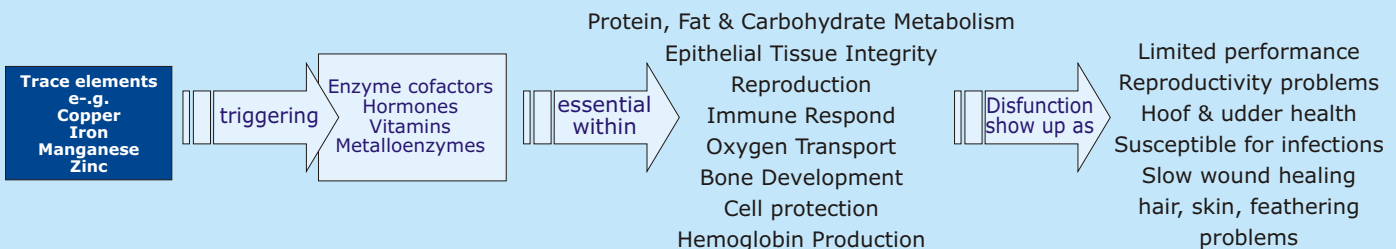


Trace Elements:

Triggering important performance function

Eventhough the daily requirement of trace elements is expressed in milligrams and micrograms, they play a vital role in various body functions like synthesis of Metalloenzymes, enzyme cofactors, Hormone production etc.

Role of Trace Elements for Growth, Health and Reproduction.



Chelated Minerals

Chel means CLAW in Greek. The Mineral needs a support to CLAW itself. This support is provided by Amino Acids and this organic support is called LIGAND in chemistry. Amino Acids have a very low molecular weight and can be absorbed easily through the walls of the intestine and hence are most preferred ligands for chelation.

It is proved by studies that Amino Acids are ideal Organic Carrier (ligands) for Minerals. The Chelated complex of Minerals with Amino Acids is very stable and has high bioavailability.

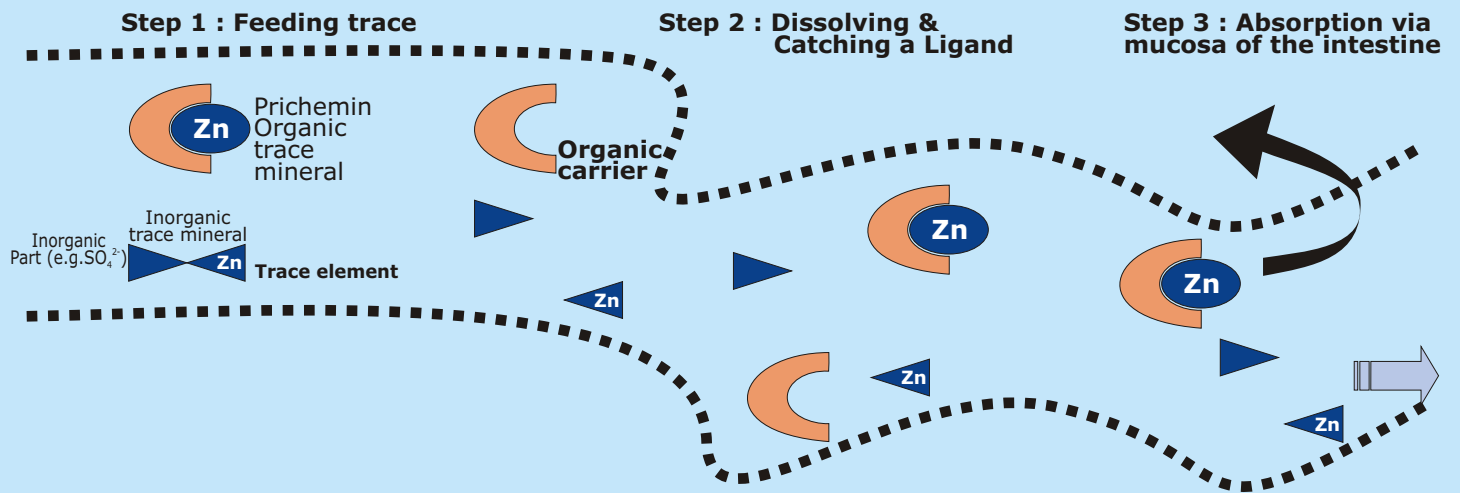
To meet the requirement of dietary needs of minerals, common practice is to use Inorganic Minerals in the animal feed. However, the stability of the premix, Dioxin level and environmental rules have put restrictions on such uses. Concentration and source of trace elements are important consideration for formulating a diet.

It is observed that trace elements in Sulphate form have better bioavailability than Oxides.

Bioavailability is not a static parameter and it not only depends on the chemical and structural difference of Inorganic Bond of the trace mineral but also on the breed, age, performance, health status of the animal and on antagonistic effects within the ration (e.g. mycotoxin, crude fiber, Phytic Acid and Negative interaction between different trace and macro elements.)

The interaction of physiological, inner and outer factors are a severe handicap within the absorption process of inorganic trace minerals. High amount of Inorganic elements in the feed which are not bonded or CLAWED to a carrier (ligand) leave the body without absorption as excreta.

PRICHEMIN derived from Soya Protein (NON GMO) is the only chelate which meets all requirements of EU and AAFCO in terms of Molecular Weight of less than 800 Daltons and Dioxin Content level of less than 1 NANOGRAM per Kg (Sum of 17 congeners of Dioxin is less than 1 NANOGRAM per Kg).



Organic Trace Minerals For Maximum Performance

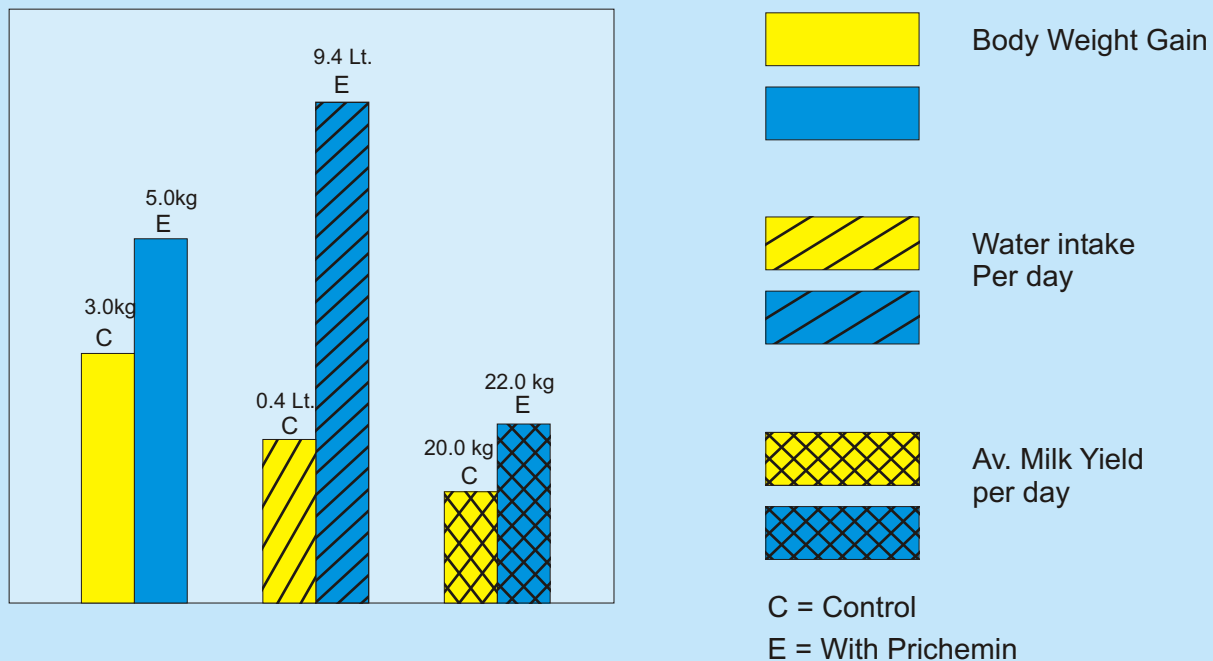
Within Modern Farming Methods Organic Trace Minerals like PRICHEMIN is more economical to use. The performance of PRICHEMIN is better with high producing or stressed animals to meet dietary and environmental mineral requirement which are not effectively met by Inorganic Minerals.

Organic Trace Minerals (EU Requirements)

Organic Trace Minerals of Amino Acids are registered feed additives (EC No 1334/2003). consisting of not more than 3 moles of Amino Acids derived from Soya Protein and Mol. weight not to exceed 1500 Daltons.

By this definition EU follows the hypothesis that small chelates have high bioavailability.

Results in Dairy Cows



Priya Chemicals being the largest manufacturer of Hydrolysed Proteins by Enzymic Hydrolysis in ASIA, has the perfect technology to produce Amino Acids needed for manufacture of PRICHEMIN.

All other manufacturers in the world buy Amino Acids from other sources.

ONLY **PRIYA CHEMICALS** DOES EVERY OPERATION UNDER ONE ROOF UNDER HIGHEST QUALITY CONTROL STANDARDS, AND IS CERTIFIED FOR ISO 9001-2000 and FAMI-QS.

PRICHEMIN means Prime Chelated Minerals

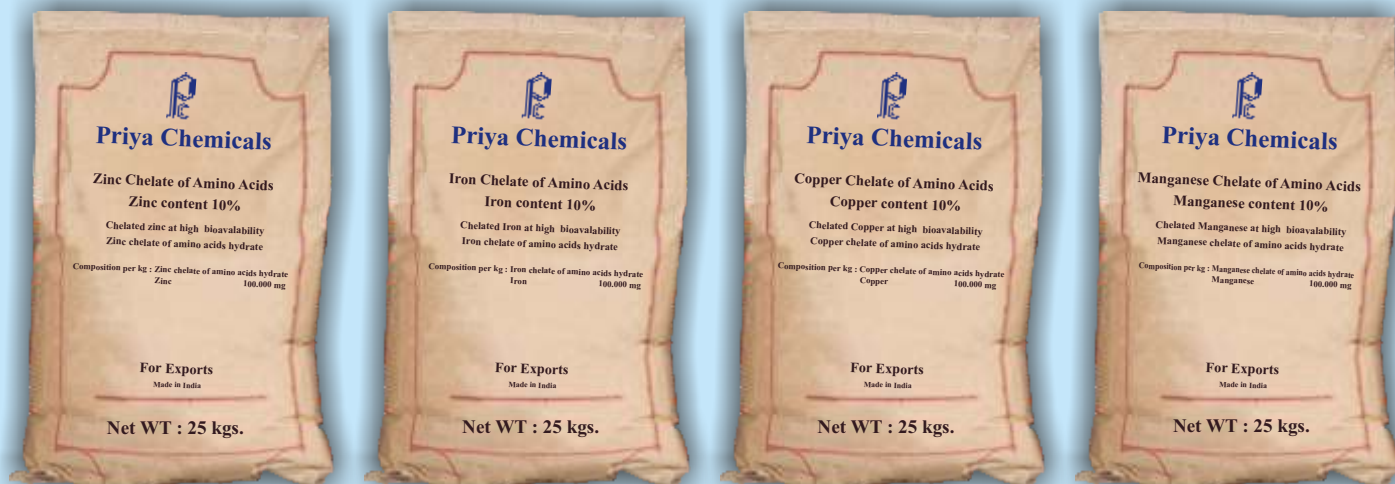
PRICHEMIN means Chelated Minerals from Primary (Basic) manufacturer of Amino Acids.

PRICHEMIN means Pride of Chelated Minerals

PRICHEMIN means Perfect Quality Chelated Minerals for Feed Production.

PRICHEMIN is available as Copper, Iron, Manganese, Zinc in concentration of 10, 15 and 20 percent Mineral Content.

Packing : 25 Kg PE Lined Multilayerd Paper Bags



Main Applications:		
Fe	Mainly Piglets, Sows and Calves	Performance, Iron Status , Skin Colour and Immunity
Cu	All Animal Categories	Fertility, Semen Quality, Offspring development, Immune response
Zn	All Animal Categories	Growth Performance, Milk Quality, Fertility, Skeletal, hoof and feather development, Eggshell Quality, Semen Quality.
Mn	Mainly Poultry, Cattle and Aquaculture	Fertility, Skeletal development, Eggshell Quality.

LIQUID CHELATES

It is necessary that animals have a balanced intake of Feed and water .

Intake of water alongwith intake of Feed is an important indicator of the health of the animal.

Pigs and Poultry drink water twice the feed intake. Whereas Cattle drink water four to five times the feed intake .Hence, any deficiency in the feed can be supplemented by nutrients through water.

To improve the efficiency of animal functions, there are a number of nutritional supplements available but all of them are not necessarily productive in terms of results obtained.

The most economical way of supplying supplementary nutrition to poultry chicks and piglets is Liquid chelates of Amino Acids, obtained from Soyabean (NON GMO) by enzymic hydrolysis.

PRICHEMIN: Liquid Chelates of Copper, Iron, Manganese and Zinc is available with 5 to 10% concentration.

Dosage: 25 ml to 100 ml per 1000 Lts of water freshly prepared.

Packing: 10 Lts and 20 Lts HDPE Carboys and 200 Lts HDPE drums.

Uses:

Poultry ,Turkey, Ducks: For Broilers, Breeders and Mother Birds Use after antibiotic treatment, Fragile Bones, Pale Birds, Wet Litter, Slow feed intake, Growth Problems , Digestion Problems, Depleted Immune System , Post Illness treatment.

Pigs: For Piglets, Fattening Pigs and Sows for treatment of stress, respiratory, growth and digestion problems. Weaning Diarrhoea, Gray animals, Depleted immune system.

PRICHEMIN Liquid Chelates are PRIME CHELATES .

Priya Chemicals also manufacture Glycine Chelates which are completely soluble in water These chelates are of Copper 10% , Manganese 10% , Iron 10% and Zinc 17%.

These chelates are becoming more and more popular because of its own advantage of stable molecular structure and smallest molecular weight. However being a single amino acid , nutritive value limitations do exist.

But being completely soluble in water its use in preparation with Vitamins for stable preparation has increased. (Specifications are available on request.)

PRICHEMIN 10%

MINERAL CHELATES OF AMINO ACIDS HYDRATE 10%

Appearance	Iron Pale Yellow Coloured Fine Powder	Zinc Pale Yellow Coloured Fine Powder	Manganese Pale Yellow Coloured Fine Powder	Copper Light Blue Coloured Fine Powder
Solubility in Water	Partial	Partial	Partial	Partial
Mineral Content (Minm)	10.0%	10.0%	10.0%	10.0%
Moisture (Maxm)	10.0%	10.0%	10.0%	10.0%
Raw Protein (Minm)	35.0%	23.0%	35.0%	35.0%
Crude Fat (Maxm)	2.0%	1.0%	2.0%	2.0%
Ash (Maxm.)	30.0%	57.0%	30.0%	33.0%
Raw Fiber (Maxm)	3.0%	2.0%	3.0%	3.0%
Dose per 100Kg Of Feedstuff	25 –100 gms	20 –80 gms	10 - 40 gms	5 –20 gms
IFN No (As Per AAFCO Official Directory)	6-26-150	6-09-897	6-16-834	6-09-896

Dioxin Content Total of 17 Congeners of Dioxin as per EU Notification 2002/70/EC
1 nanogram per Kg (1 microgram per Metric Tonne)

Heavy Metals Lead less than 10 ppm Mercury less than 1 ppm
Arsenic less than 2 ppm Cadmium less than 2 ppm

Microbiological Limit Absence of Pathogens as per IP/BP/USP

Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L-Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L-Glycine	4.2
L-Histidine	2.6	L-Isoleucine	4.9	L-Leucine	8.2
L-Lysine	6.3	L-Methionine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosine	3.8	L-Valine	5.0

Packing : 25 Kg PE Lined Multilayered Paper Bags.

Product is hygroscopic in nature and should be kept at room temperature and in a dry place.

PRICHEMIN 15%

MINERAL CHELATES OF AMINO ACIDS HYDRATE 15%

Appearance	Iron Pale Yellow Coloured Fine Powder	Zinc Pale Yellow Coloured Fine Powder	Manganese Pale Yellow Coloured Fine Powder	Copper Light Blue Coloured Fine Powder
Solubility in Water	Partial	Partial	Partial	Partial
Mineral Content (Minm)	15.0%	15.0%	15.0%	15.0%
Moisture (Maxm)	10.0%	10.0%	10.0%	10.0%
Raw Protein(Minm)	28.0%	23.0%	25.0%	20.0%
Crude Fat(Maxm)	2.0%	1.0%	2.0%	2.0%
Ash(Maxm)	30.0%	57.0%	30.0%	45.0%
Raw Fiber (Maxm)	3.0%	2.0%	3.0%	3.0%
Dose per 100 Kg Of Feedstuff	25 –100 gms	20 –80 gms	10 – 40 gms	5 –20 gms
IFN No (As Per AAFCO Official Directory)	6-26-150	6-09-897	6-16-834	6-09-896

Dioxin Content Total of 17 Congeners of Dioxin as per EU Notification 2002/70/EC
1 nanogram per Kg (1 microgram per Metric Tonne)

Heavy Metals Lead less than 10 ppm Mercury less than 1 ppm
Arsenic less than 2 ppm Cadmium less than 2 ppm

Microbiological Limit Absence of Pathogens as per IP/BP/USP Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L- Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L- Glycine	4.2
L-Histidine	2.6	L-Isoleucine	4.9	L-Leucine	8.2
L-Lysine	6.3	L-Methionine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosine	3.8	L-Valine	5.0

Packing : 25 Kg PE Lined Multilayered Paper Bags.

Product is hygroscopic in nature and should be kept at room temperature and in a dry place.

PRICHEMIN 20%

MINERAL CHELATES OF AMINO ACIDS HYDRATE 20%

Appearance	Iron Pale Yellow Coloured Fine Powder	Zinc Pale Yellow Coloured Fine Powder	Manganese Pale Yellow Coloured Fine Powder	Copper Light Blue Coloured Fine Powder
Solubility in Water	Partial	Partial	Partial	Partial
Mineral Content (Minm)	20.0%	20.0%	20.0%	20.0%
Moisture (Maxm)	10.0%	10.0%	10.0%	10.0%
Raw Protein(Minm)	10.0%	10.0%	10.0%	10.0%
Crude Fat (Maxm)	2.0%	1.0%	2.0%	2.0%
Ash (Maxm)	40.0%	57.0%	40.0%	45.0%
Raw Fiber (Maxm)	3.0%	2.0%	3.0%	3.0%
Dose per100Kg Of Feedstuff	25 -100 gms	20 -80 gms	10 - 40 gms	5 -20 gms
IFN No (As Per AAFCO Official Directory)	6-26-150	6-09-897	6-16-834	6-09-896

Dioxin Content Total of 17 Congeners of Dioxin as per EU Notification 2002/70/EC
1 nanogram per Kg (1 microgram per Metric Tonne)

Heavy Metals Lead less than 10 ppm Mercury less than 1 ppm
Arsenic less than 2 ppm Cadmium less than 2 ppm

Microbiological Limit Absence of Pathogens as per IP/BP/USP Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L-Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L-Glycine	4.2
L-Histidine	2.6	L-Isoleucine	4.9	L-Leucine	8.2
L-Lysine	6.3	L-Methionine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosin	3.8	L-Valine	5.0

Packing : 25 Kg PE Lined Multilayered Paper Bags.

Product is hygroscopic in nature and should be kept at room temperature and in a dry place.

PRICHEMIN

MINERAL CHELATES OF AMINO ACIDS HYDRATE

	Selenium	Cobalt	Chromium	
Appearance	Pale Yellow Coloured Fine Powder	Pale Yellow Coloured Fine Powder	Pale Yellow Coloured Fine Powder	
Solubility in Water	Partial	Partial	Partial	Chelates of Different Concentration are available.
Mineral Content (Minm)	2.0%	2.5%	2.0%	
Moisture (Maxm)	10.0%	10.0%	10.0%	
Raw Protein(Minm)	48.0%	44.0%	47.0%	
Crude Fat (Maxm)	2.0%	2.0%	2.0%	
Ash (Maxm)	33.0%	35.0%	34.0%	
Raw Fiber (Maxm)	2.0%	2.0%	2.0%	

Dioxin Content Total of 17 Congeners of Dioxin as per EU Notification 2002/70/EC
1 nanogram per Kg (1 microgram per Metric Tonne)

Heavy Metals Lead less than 10 ppm Mercury less than 1 ppm
Arsenic less than 2 ppm Cadmium less than 2 ppm

Microbiological Limit Absence of Pathogens as per IP/BP/USP

Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L- Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L- Glycine	4.2
L-Histidine	2.6	L-Isoleucine	4.9	L-Leucine	8.2
L-Lysine	6.3	L-Methionine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosine	3.8	L-Valine	5.0

Packing : 25 Kg PE Lined Multilayered Paper bags

Product is hygroscopic in nature and should be kept at room temperature and in a dry place.

PRICHEMIN MIXTURE

MIXTURE OF MINERAL CHELATES OF AMINO ACIDS HYDRATE

Description Cream coloured Powder

Solubility in water Partial

Moisture (Maxm) 10.0 %

Raw Protein (Minm) 30.0%

Crude Fat (Maxm) 2.0%

Ash (Maxm) 30.0%

Raw Fiber (Maxm) 3.0%

Content of Mineral (Minm):

Zinc 3.6%

Copper 1.25%

Manganese 2.5%

Heavy Metals: Lead **Less than 10 ppm**

Mercury **Less than 1 ppm**

Arsenic **Less than 2 ppm**

Cadmium **Less than 2 ppm**

Microbiological Limit Absence of Pathogens as per IP/BP/USP

Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L-Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L-Glycine	4.2
L-Histidine	2.6	L-Isoleucine	4.9	L-Leucine	8.2
L-Lysine	6.3	L-Methoinine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosine	3.8	L-Valine	5.0

Packing : 25 Kg PE Lined Multilayered Paper Bags.

Product is Hygroscopic in nature and should be kept at room temperature and in a dry place.

PRICHEMIN LIQUID

LIQUID MINERAL CHELATES OF AMINO ACIDS

	Iron	Zinc	Manganese	Copper
Appearance	Clear Brown Liquid	Clear Yellow Liquid	Clear Yellow Liquid.	Clear Blue Liquid
Odour	Slight	Slight	Slight	Slight
Density gm / cc	1 .20 – 1.35	1.20 – 1.35	1.30 –1.45	1.20 – 1.35
Kjeldahl Nitrogen	2 – 3 %	2 – 3 %	2 – 3 %	2 – 3 %
pH	6.0 – 7.0	3.0 – 5.0	4.0 – 6.0	2.0 – 4.0
Mineral Content (MINM)	10.0%	10.0%	10.0%	10.0%

Dioxin Content Total of 17 Congeners of Dioxin as per EU Notification 2002/70/EC
1 nanogram per Kg (1 microgram per Metric Tonne)

Heavy Metals Lead less than 10 ppm Mercury less than 1 ppm
Arsenic less than 2 ppm Cadmium less than 2 ppm

Microbiological Limit Absence of Pathogens as per IP/BP/USP

Aminogram (expressed as percentage of the raw protein)

L-Alanine	4.3	L-Arginine	7.6	L- Aspartic Acid	11.6
L-Cystine	1.3	L-Glutamic Acid	19.1	L- Glycine	4.2
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L-Lysine	6.3	L-Methionine	1.3	L-Phenylalanine	5.2
L-Proline	5.1	L-Serine	5.2	L-Threonine	3.7
L-Tryptophan	1.4	L-Tyrosine	3.8	L-Valine	5.0

Packing : 10 / 25 / 50 Lts HDPE Carbouys and 200 Lts HDPE Drums.

Product should be kept at room temperature and in a dry place.