



## MATERIAL SAFETY DATA SHEET

PRODUCT : Amino Acid Mixture

PRODUCT DESIGNATION : Micronutrient

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### Section 1. Product & Company Identification

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Common Name : Amino Acid

Grade : Formulation

Active Ingredient : Amino Acid

Chemical Name of Active : Amino ethanoic acid

Ingredient (IUPAC)

Chemical Family of A. I. : Carboxylic acid group

Molecular Formula of A. I. :  $H_2NCHR\text{COOH}$  where R is an organic substitute

Molecular Mass of A. I. : **110Da**

Manufacturer & Supplier : **M/s PERFECT SOLUTIONS**

**Office Add:** B-371, Paschim Vihar, New Delhi -  
110063 (India)

**Factory Add:** 15/1, 15/2, 15/3 Industrial Estate,  
Vidisha - 464001 (M.P)

Telephone Number : +91 8375844625

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### Section 2. Composition / Information on Ingredients

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Amino Acid a.i. : **50-55%w/w**

CAS No. : **56-40-6**

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### Section 3. Hazards Identification

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**Not considered as hazardous**

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### Section 4. First Aid Measures

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**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated



clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

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## Section 5. Fire Fighting Measures

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**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol resistant foam. Water spray may cause frothing.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

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## Section 6. Accidental Release Measures

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**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

Clean up spills immediately, observing precautions in the Protective Equipment section.

Avoid generating dusty conditions. Provide ventilation.

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## Section 7. Handling & Storage

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**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.



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## Section 8. Exposure Control, Personal Protection

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**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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## Section 9. Physical and Chemical Properties

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<b>Appearance / state</b>	: Solid Powder
<b>Colour</b>	: Creamins to light brownish yellow
<b>Odour</b>	: Not distinctive
<b>Density</b>	: 0.47
<b>Solubility</b>	: Completely Soluble in water
<b>PH</b>	: 5 to 6.5

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## Section 10. Stability & Reactivity

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**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to Avoid:** High temperatures, incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizers.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.



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## Section 11. Toxicological Information

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**Acute Oral Toxicity** : LD<sub>50</sub> for rats : >5000 mg/kg

**Acute Dermal Toxicity** : LD<sub>50</sub> for rats : >2000 mg /kg

**Acute Inhalation** : LC<sub>50</sub> (4h) rats : >5 mg/l for 2h/d for 21 days

**Eye Irritation** : non- irritating

**Skin Irritant** : non- irritating

**Skin sensitization** : Non sensitizer

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## Section 12. Ecological Information

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NA

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## Section 13. Disposal Consideration

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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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## Section 14. Transport Information

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**DOT** :Not regulated as dangerous goods

**IATA** :Not regulated as dangerous goods

**IMDG** :Not regulated as dangerous goods

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## Section 15. Regulatory Information

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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.



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## **Section 16. Other Information**

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All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are resented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS. Accordingly, no guarantee or warrantee expressed or implied is made by PERFECT SOLUTIONS, as to the results to be obtained based upon the user's use of the information, nor does PERFECT SOLUTIONS, assume any liability arising out of user's use of the information.

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