

<u>Hi-Protein Soybean Meal</u>

| Analytical | Standard | Minimum |
|------------|----------|---------|
| Protein | 48% | 47.5% |
| Fat | 0.5% | 0.5% |
| Fiber | 3.5% | |
| Moisture | 12.5% | |

Adjustments at a 1:1 ration; fractions in proportions; non-reciprocal.

<u>Crude Degummed Soybean Oil</u> sold for export shall be pure soybean oil. It shall be produced from fair average quality crude soybean oil from which the major portion of the gums naturally present has been removed by hydration and mechanical or physical separation. It shall be equal in quality to soybean oil produced for domestic consumption.

| Analytical | Maximum | Minimum | Method |
|----------------------------------|---------|---------|------------------|
| Unsaponifiable matter | 1.5% | | Ca 6a-40(97) |
| Free Fatty Acids, as Oleic | 0.75% | | Ca 5a-40(97) |
| Moisture and Volatile Matter and | 0.3% | | M&V Ca 2d-25(97) |
| Insoluble Impurities | 0.5 /6 | | Ca 3a-46(97) |
| Flash Point | | 250°F | Cc 9c-95(97) |
| Phosphorus | 0.02% | | Ca 12-55(97) |

The chemical analysis to determine quality shall include the qualitative test for fish oil and marine animals as prescribed by AOAC Method No. 28.121 and shall be negative.

Only the following are allowable with the discounts to apply as shown:

| Free Fatty Acids | Discount from contract price |
|------------------|------------------------------|
| 0.76 - 0.85% | 0.2% |
| 0.86 - 0.95% | 0.4% |
| 0.96 - 1.05% | 0.6% |
| 1.06 - 1.15% | 0.9% |
| 1.16 – 1.25% | 1.2% |

| | Shipment up to 0.025% permitted with discount |
|------------|---|
| Phosphorus | from contract value |
| 0.021% | 0.2% |
| 0.022% | 0.4% |
| 0.023% | 0.6% |
| 0.024% | 0.9% |
| 0.025% | 1.2% |



Soy Products Specifications

<u>Fully Refined Soybean Oil</u> sold for export shall be pure soybean oil. It shall be produced from fair average quality crude soybean oil from which essentially all of the free fatty acids and non-oil substances have been removed by chemical treatments and by mechanical or physical separation. It shall meet the following specifications:

Analytical Requirements:

- 1. Flavor shall be bland.
- 2. Color (Lovibond) maximum 20Y/2.OR using AOCS Method Cc 13b-45(97) procedure.
- 3. % FFA (% by wt.) maximum 0.05 using AOCS Method Ca 5a-40(97) procedure.
- 4. Clear and brilliant in appearance at 70-85°F.
- 5. Cold Test minimum 5 ½ hours using AOCS Method Cc 11-53(97)
- 6. Shall contain not more than 0.10% moisture and volatile matter using AOCS Official Method Ca 2d-25(97).
- 7. The unsaponifiable content shall not exceed 1.5% when determined according to AOCS Method Ca 6a-40(97).
- 8. The peroxide value Meq./Kg. shall not exceed 2.0 when determined by AOCS Method Cd 8-53(97).
- Stability AOM, minimum is 8 hrs. 35 Meq./Kg. when using the AOCS Method Cd 12-57(97).
- 10. Preservatives (GRAS) are permitted.

Chemical analysis shall be made in accordance with the methods from "Official Methods and Recommended Practices of the American Oil Chemists' Society, Chapter: Commercial Fats and Oils, Section C."

The chemical analysis to determine quality shall include the qualitative test for fish oil and marine animal oils as prescribed by AOAC Method No. 28.121, and shall be negative.

Physical Requirements:

- 1. The oil shall be clear and brilliant in appearance at 70-85 °F.
- 2. The oil shall be free from settlings or foreign matter of any kind.
- 3. The oil shall be bland and free from rancid, painty, musty, soapy, fishy, metallic, beany and other foreign or undesirable odors and flavors when tested by the method specified in 4.3.2, as outlined in Federal Specifications JJJ-S-30b.

NOTE: The National Oilseed Processors Association has developed a Standard for Inspection, Sampling and Measuring Procedures for Bulk Shipment and Transfers of Soybean Oil. This Standard may be incorporated in sales contracts.