



### Vegetable Oil

Free fatty acid (aspalmitic) – 0.1 % max  
 Moisture & Impurities - 0.1 % max  
 Iodine value (wijs method) – 56 min.  
 Slip melting point – 24 deg C max.  
 Colour (51/4 lovibond cell) 3 red max



## Soybean Meal Oil Standard Quality

Free Fatty Acid %: .....0.05 – 0.1%  
 Peroxide Value meq/kg: .....0.5 - 1.0 meq/kg  
 Refractive Index @ 40oC: ..... 1.4666 – 1.47  
 Iodine Value (Wijs): ..... 123 - 139  
 Moisture %: ..... 0.05 – 0.1%  
 Cold Test: ..... 5.5 hrs  
 OSI @ 110oC: ..... 5.5 – 6.0 hrs  
 Saponification Value: ..... 191 - 192  
 Specific Gravity @ 25oC: ..... 0.915 – 0.925  
 Smoke Point: ..... 460 – 465oF  
 Flash Point: ..... 650 – 655oF  
 Fire Point: ..... 690 – 695oF

### Fatty Acid Properties

#### Typical Fatty Acid Profile (major acids)

| Type  | Name                       |
|---|----------------------------|
| C14:0   | Myristic 0.1%              |
| C16:0   | Palmitic 8.0 – 14.0 %      |
| C16:1   | Palmitoleic 0.0 – 0.2%     |
| C17:0   | Heptadecanoic 0.0 – 0.1%   |
| C17:1   | 9-Heptadecenoic 0.0 – 0.1% |
| C18:0   | Stearic 3.0 – 5.0 %        |
| C18:1   | Oleic 20.0 – 32.0 %        |
| C18:2   | Linoleic 47.0 – 57.0%      |
| C18:3   | Linolenic 5.8 – 8.2 %      |
| C20:0   | Arachidic 0.1 – 0.5%       |
| C20:1   | Eicosenoic 0.2 – 0.3%      |
| C22:0   | Behenic 0.2%               |
| C24:0   | Lignoceric 0.0 - 0.1%      |
| Total Saturated Acids: ..... 8.1 - 16.0%        |                            |
| Total Monounsaturated Acids: ..... 23.5 - 32.4% |                            |
| Total Polyunsaturated Acids: ..... 52.8 - 62.2% |                            |



## Soybean Oil Standard Export Quality

|  |                 |
|--|-----------------|
| Free Oil Acidity (Expressed OS Oleic Acid) ..... | 0.30%           |
| Max Refractive Index at .....                    | 40C 1.466-1.470 |
| Peroxide Value (Meg. Gr/Kg) .....                | 1.0 Max         |
| Saponification Value .....                       | 189-195         |
| Iodine Value .....                               | 120-143         |
| Density at .....                                 | 20C 0.909-0.925 |
| Unsaponifiable Matters .....                     | 1.5% Max        |
| Appearance Clear Soap Test .....                 | 0.005% Max      |
| Insoluble Impurity in Ether .....                | 0.05 Max        |
| Volatile Matter at 105C Test Negative            |                 |
| Mineral Oil Test Negative                        |                 |
| Sesame Seed Oil Test Negative                    |                 |
| Cold Test after 24 Hours Negative                |                 |
| FF (Iron) .....                                  | 1.5 Max         |
| CU (Copper) .....                                | 0.1 Max         |
| PB (Lead) .....                                  | 0.1Max          |



