

# NOVA Select Plus Grade Biodiesel

## Technical Data Sheet

### Description:



### Methyl Esters, saturated and unsaturated

**CAS#** 68990-52-3 & 61788-61-2

**Formula:** C<sub>n-1</sub>H<sub>2n-1</sub>COOCH<sub>3</sub>

NOVA Select Plus Grade Biodiesel is composed primarily of unsaturated Methyl Esters having 16 or 18 carbons; 'n' in the structural diagram above refers to the different carbon chain lengths present, from C6 up to C20. It is a clear liquid under ambient conditions with a musty odor.

### Application

NOVA Select Plus Grade Biodiesel is intended as a Fuel or Fuel Additive, which meets both EN 14214 and ASTM 6751 specifications for Biodiesel. Beyond these specifications, NOVA Biodiesel have also been manufactured in order to be "fit-for-purpose" in fuel applications.

### Physical Properties

Insoluble in water under ambient conditions, but suitable solvents include ethyl ether, and mineral oil.

Specific Gravity: 0.9 @ 25/25°C

Cloud Point: >5-10°C

Cetane Number: >47

CSFT <200s

### Oil Derivation/Microbial

Select Plus Grade Biodiesel is composed of mono-alkyl esters that are manufactured entirely from naturally occurring animal and vegetable fats and oils.

- Preservatives or additives may or may not be present.
- Due to our process conditions, we do not believe that microbiological activities exist within Select Plus Grade Biodiesel.

### Material Availability

These products are available at the following locations and in the respective containers sizes:

Seneca, IL Tank wagon or Rail Car  
 Clinton, IA Tank wagon or Rail Car

### Shelf Life\*

Shelf life is affected by how a product is stored. The National Biodiesel Board has conducted or sponsored extensive stability study tests for Biodiesel and suggests a shelf-life of six months. However, this can be significantly increased or decrease based upon individual storage conditions.

### Storage and Handling (recommended)\*

**Storage Temp Targets:** 80-100°F (27-38°C)  
**Handling Temp Min-Max:** 80-100°F (27-38°C)  
**Sensitive Properties:** Color  
**Max Steam, psig:** 150  
**Nitrogen Blanket:** No  
**Load out filter:** <10 micron  
**Rail Car or Tank Truck:** Carbon Steel  
**Agitation/Recirculation:** Needed only while heating  
**Storage Tank:** Carbon Steel  
**Pumps and Lines:** Carbon Steel

### Material Compatibility\*

<b>Recommended</b>	<b>Not Recommended</b>
Teflon	Nitrile
Viton	Buna N
Fluorinated Plastics	Natural Rubber
Nylon	Polypropylene
Aluminum	Polyethylene
Carbon, Stainless Steel	Lead, Tin, Z/nc
Fiberglass (most types)	Copper, Brass, Bronze

**Note:** Methyl esters attack, swell, and soften many different types of rubber and plastic such as gaskets and hoses. Concrete is slowly swollen and deteriorated by contact.

\*The Biodiesel Handling and Use Guide™, published by the National Renewable Energy Laboratory, contains further details and guidelines for the use of Biodiesel. A copy of this guide can be provided by Nova Biosource Fuels for your review.

[www.NovaBiosource.com](http://www.NovaBiosource.com)

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