



TECHNICAL DATA SHEET
LITTLE FALLS PLANT – MN/US
VERSION 1.0
09/05/2025

Generic Name: OLEIC ACID

CAS Number: 112-80-1

EINECS Number: 204-007-1

SPECIFICATION:

ANALYSYS	UNIT	RANGE
Acid value	mg KOH/g	190 - 210
Iodine index	g/100g	< 105
Saponification value	mg KOH/g	190 - 210
Color Gardner	-	< 5
Moisture	%	< 025
FATTY ACID BY GAS CHROMATOGRAPHY (%)		
C16	%	3 - 6
C18:0	%	1 - 4
C18:1	%	60 - 75
C18:2	%	10 - 15
C18:3	%	< 3
Others	%	1 - 3

PRODUCT DESCRIPTION/APPLICATION

NUOL Oleic Acid is a monounsaturated fatty acid with the chemical formula C₁₈H₃₄O₂. It is a colorless to pale yellow, odorless liquid at room temperature, with a slightly greasy texture. NUOL Oleic Acid is the most common fatty acid found in animal and vegetable oils, where it typically makes up around 55-83% of the total fatty acid content. It is a non-toxic, stable, and biodegradable compound, making it an environmentally friendly option for various applications.

It is a versatile compound due to its amphiphilic nature, meaning it contains both hydrophilic (water-attracting) and hydrophobic (water-repelling) properties, which allows it to function as an effective emulsifier and surfactant in many formulations.

NUOL Oleic Acid is widely used in skincare and haircare products due to its emollient properties. It helps to hydrate, soften, and smooth the skin, and it is particularly beneficial

for dry or sensitive skin. It is commonly found in moisturizers, lotions, creams, lip balms, and shampoos, where it acts as a conditioning agent, providing a silky texture and improving the spreadability of the product.

In the food sector, NUOL Oleic Acid is primarily used as a component of edible oils, such as olive oil, canola oil, and sunflower oil. These oils are used in cooking and as ingredients in various food products. NUOL Oleic Acid is also used as an emulsifier in the preparation of salad dressings, margarine, and other processed foods, where it helps to stabilize emulsions and improve the texture and consistency of the product.

It is used in pharmaceutical formulations as a carrier or solubilizer for active ingredients. Its ability to enhance the bioavailability of poorly soluble compounds makes it useful in drug delivery systems. It is often included in topical treatments, creams, and ointments, where it can improve the penetration of active ingredients into the skin.

NUOL Oleic Acid is employed in the production of surfactants, detergents, and lubricants due to its emulsifying and dispersing properties. It is also used in the manufacture of biodiesel, where it serves as a feedstock for the production of methyl esters.

It is a highly versatile fatty acid with numerous applications across the cosmetics, food, pharmaceutical, and industrial sectors. Its beneficial properties as an emollient, emulsifier, and solubilizer make it a valuable ingredient for enhancing the performance and stability of a wide range of formulations. Whether in skincare products, cooking oils, or as a feedstock for biodiesel, oleic acid continues to be a key component in many industries, prized for its natural origin, safety, and effectiveness.

HANDLING PRECAUTIONS:

When handling NUOL Oleic Acid, it is important to take safety precautions to minimize exposure. Always wear appropriate personal protective equipment (PPE), such as gloves, goggles, and protective clothing, to prevent skin and eye contact. Ensure the workspace is well-ventilated to avoid inhaling vapors or fumes. Store NUOL Oleic Acid in a cool, dry place, away from heat sources, direct sunlight, and incompatible materials such as strong oxidizers. In case of spills, clean up promptly using inert absorbent materials and dispose of waste according to local environmental regulations. If skin or eye contact occurs, rinse the affected area thoroughly with water and seek medical attention if necessary. Always refer to the Safety Data Sheet (SDS) for detailed handling and emergency procedures.

SHIPPING CLASSIFICATION

NUOL Oleic Acid is generally classified as a non-hazardous substance for shipping. It is not considered a dangerous good under the United Nations (UN) classification system. However, it should still be handled and transported according to standard chemical shipping regulations to ensure safety. NUOL Oleic Acid must be securely packaged in suitable containers to prevent leaks or spills during transport. Proper labeling and documentation, including the Safety Data Sheet (SDS), should accompany shipments. Always verify specific shipping requirements with local and international regulations, such

as those from the International Maritime Dangerous Goods (IMDG) Code or U.S. Department of Transportation (DOT).

Not regulated for transport. Not classified in RID/ADR - ADNR - IMDG - ICAO/IATA - DGR

REGULATORY STATUS

The components of this material are listed on the U.S. TSCA Inventory and the Canadian Domestic Substance List.

NUOL Oleic Acid is widely used in food, cosmetics, and industrial applications and is generally considered safe within regulated limits. In the United States, it is approved by the Food and Drug Administration (FDA) as a food ingredient and is commonly used in food products, dietary supplements, and cosmetics. It is recognized as Generally Recognized as Safe (GRAS) for consumption. In the European Union, NUOL Oleic Acid is allowed for use in food and cosmetics, provided it complies with EU regulations on food safety and cosmetic ingredients. For industrial applications, NUOL Oleic Acid is subject to regulations such as REACH in the EU and the U.S. Toxic Substances Control Act (TSCA). Always consult the relevant Safety Data Sheet (SDS) and local regulatory authorities to ensure compliance with applicable safety and usage standards.

DELIVERY FORM

Liquid in road tanker, rail tank wagon, ISO-container, flex tank, IBC-container or 188 kgs net in steel drums.