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

Generic Name: GREEN SOLKETAL

CAS Number: 100-79-8

EINECS Number: 202-888-7

SPECIFICATION:

Product Specification	Limits	Method
Assay % (GC)	≥ 99.5%	GC-FID (Internal)
Appearance	Clear	ACS
Color APHA (Pt-Co)	≤ 30	ASTM D1209
Density @ 20° C	1.06 – 1.08 g/cm^3	ASTM D4052
Residue after evaporation	≤ 5 mg/100 mL	ASTM D1353
Boiling Point	188 – 190 °C	ASTM D1078
Flash Point (Closed Cup)	~82 °C	ASTM D93
Water	≤ 0.5 wt%	ASTM D 1364

PRODUCT DESCRIPTION/APPLICATION

NUOL Green Solketal is a renewable, biobased acetal derived from the reaction of glycerol and acetone. It is a colorless, low-viscosity liquid with excellent solubility and a high boiling point, widely used for its multifunctional performance in fuel additives (as octane booster and cold flow improver in gasoline and biodiesel), solvent applications (in coatings, inks, agrochemicals), chemical intermediate for specialty esters and polymers, cosmetic and pharmaceutical formulations (due to its biocompatibility).

NUOL Green Solketal is a versatile organic solvent with the chemical formula C6H12O3. It is a colorless, odorless, and slightly viscous liquid that is soluble in both water and organic solvents. Is commonly produced through the reaction of acetone and glycerol, forming a compound known for its low toxicity, high stability, and compatibility with various applications.

NUOL Green Solketal is a valuable chemical compound with broad applications across multiple industries, offering an environmentally friendly and efficient alternative to other solvents and carriers. Is a 100% green product, making it a green choice for formulators.

HANDLING PRECAUTIONS:

Handle in accordance with good hygiene and safety procedures. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling it. Since empty containers contain product residue and can be dangerous, follow all hazard warnings and precautions even after container is emptied. Keep away from sources of ignition. Avoid spillage, inhalation and contact with eyes and skin. Keep well closed.

When handling NUOL Green Solketal, it is essential to use appropriate personal protective equipment (PPE), including gloves, safety goggles, and protective clothing, to prevent skin and eye contact. Work in well-ventilated areas or use local exhaust ventilation to avoid inhalation of vapors. Avoid exposure to high temperatures, open flames, and direct sunlight, as these can affect the stability of the product. Ensure that NUOL Green Solketal is stored in tightly sealed containers, in a cool, dry place, away from incompatible substances. In case of skin or eye contact, wash immediately with plenty of water and seek medical attention if necessary.

NUOL Green Solketal is not classified as flammable but may form combustible mixtures at elevated temperatures. Always consult the Safety Data Sheet (SDS) for detailed handling, storage, and emergency instructions.

SHIPPING CLASSIFICATION

NUOL Green Solketal is classified as a non-hazardous substance for shipping under international transport regulations. It is not considered dangerous or flammable under the United Nations (UN) classification system for dangerous goods. During transport, Bio Solketal should be securely packaged in tightly sealed, leak-proof containers to prevent spillage and contamination. It should be stored and transported in a cool, dry environment, away from excessive heat and direct sunlight, to maintain product stability. Always follow local shipping regulations and refer to the Safety Data Sheet (SDS) for specific packaging, labeling, and documentation requirements.

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 Green Solketal is generally considered safe for use in various industrial and commercial applications, including as a solvent in pharmaceuticals and cosmetics. It is not classified as a hazardous substance under major regulatory frameworks such as the U.S. EPA, OSHA, or the European Chemicals Agency (ECHA). However, its use in food products,

drugs, and cosmetics is subject to specific regulatory requirements, including compliance with safety and quality standards set by agencies such as the FDA (U.S. Food and Drug Administration) and the European Medicines Agency (EMA). Always refer to the relevant local regulations and the Safety Data Sheet (SDS) for guidance on safe handling, use, and disposal.

DELIVERY FORM

Liquid in road tanker, rail tank wagon, ISO-container, flex tank, IBC-container or 200L steel drums.