

CAS Reg. No.: 902272-78-0

INCI NAME: Ethyl Glycerin Acetal Levulinate

**DESCRIPTION:**

- Pure Ketal Ester-based Solvent
- 100% Biogenic Carbon (partly derived from agricultural waste) according to ASTM D6866-20
- Ultimately biodegradable
- Non-flammable, Non-combustible and Low volatile
- Non-corrosive, Non-sensitizing and Non-toxic
- Miscible in conventional organic solvents and water
- Listed as Solvent in the Safer Chemical Ingredients List of US EPA Safer Choice; listed as Biobased Product (Intermediate) in the USDA BioPreferred® Program

**PERFORMANCE:**

- Sustainable replacement of dibasic esters and glycol ethers
- Compatibilization of oil and water with simultaneous reduction in use of surfactants
- Ability to bring difficult ingredients into formulation with low to no foaming
- Stabilization of formulations – reduction of the risk of phase separations even in concentrated solutions – and improvement of freeze-thaw properties
- Excellent soil-removal properties and powerful stain-cutting ability for both hard and soft surfaces

**APPLICATIONS:**

- Agrochemistry
- CASE
- Home care

**PHYSICO-CHEMICAL PROPERTIES:**

PROPERTY	UNIT	RESULT
APPEARANCE	-	Clear liquid
AUTOIGNITION TEMPERATURE	°C	376
BOILING POINT	°C	285.8
COLOUR		Colourless to very pale yellow
DENSITY (22.8 °C)	g/ml	1.13
FLASH POINT	°C	> 93.3
HSP (25 °C)	-	-
DISPERSION (δD)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	15.27
POLAR (δP)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	12.72
HYDROGEN BONDING (δH)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	10.93
MELTING POINT / FREEZING POINT	°C	< -60
MOLECULAR	-	-
FORMULA	-	C <sub>10</sub> H <sub>18</sub> O <sub>5</sub>
WEIGHT	g/mol	218.25

PROPERTY	UNIT	RESULT
PARTITION COEFFICIENT / LOG P (20 °C)	-	0.37
SOLUBILITY IN WATER (20 °C)	g/l	> 1,000
SURFACE TENSION (72 °F, 22.2 °C)	dyn/cm	37.05
VAPOUR PRESSURE	-	-
20 °C	kPa	0.0001
25 °C	kPa	0.0002
VISCOSITY (DYNAMIC) (24.7 °C)	mPa·s	37.4

**SHELF LIFE AND STORAGE:** The Product has a shelf life of 730 days from the date of manufacture when stored in the original unopened containers in normal conditions.

**COMPATIBILITY:**

MATERIAL	COMPATIBILITY	MATERIAL	COMPATIBILITY
ABS	Orange	NITRILE RUBBER	Yellow
ACRYLIC	Light Green	NYLON	Light Green
ADMIRALTY BRASS (CDA443)	Dark Green	POLYETHYLENE TEREPHTHALATE	Light Green
ALUMINIUM (Al2024 - T3)	Dark Green	POLYPROPYLENE	Dark Green
ALUMINIUM (Al5083)	Dark Green	POLYVINYLCHLORIDE (PVC)	Light Green
ALUMINIUM (Al7075 - T6)	Dark Green	PVA	Red
BUTYL RUBBER	Yellow	PVDF	Yellow
CHLORINATED PVC	Dark Green	SAN GRADE 1	Red
CLAD ALUMINIUM (Al2024 - T3)	Dark Green	SAN GRADE 2	Red
CLAD ALUMINIUM (Al7075 - T6)	Dark Green	SAN GRADE 3	Red
COPPER (CDA110)	Orange	SBR	Red
EPDM	ND	SILICONE	ND
GALVANIZED MILD STEEL (C1010)	Dark Green	STAINLESS STEEL (304L)	Dark Green
GALVANIZED STEEL (G90)	Dark Green	STAINLESS STEEL (316L)	Dark Green
HIGH DENSITY POLYETHYLENE	Dark Green	TEFLON	ND
LDPE	Yellow	TYGON	ND
NEOPRENE	Red	VITON	ND

Low (red / orange) to medium (yellow) and high compatibility (light / dark green).