

CAS Reg. No.: 5413-49-0

INCI NAME: Ethyl PG-Acetal Levulinate

DESCRIPTION:

- High Purity Ketal Ester-based Solvent
- 72% Biogenic Carbon (derived from agricultural waste) according to ASTM D6866-20
- Ultimately biodegradable
- Non-flammable, Non-combustible and Low volatile
- Non-irritant, Non-corrosive, Non-sensitizing and Non-toxic
- Miscible in conventional organic solvents and water
- GRAS (Generally Recognized As Safe) rated substance and listed as Solvent in the Safer Chemical Ingredients List of US EPA Safer Choice
- Leaping Bunny compliant for Cosmetics & Personal care products

PERFORMANCE:

- Sustainable replacement of petrochemicals (Naturality Origin Index, ISO 16128 = 0.7)
- Outstanding performance in Cosmetics & Personal care products as solvent / emollient
- Compatibility with a wide range of cosmetic ingredients

APPLICATIONS:

- Cosmetics & Personal care

PHYSICO-CHEMICAL PROPERTIES:

PROPERTY	UNIT	RESULT
APPEARANCE	-	Clear liquid
AUTOIGNITION TEMPERATURE	°C	353
BOILING POINT	°C	225.2
COLOUR		Colourless to very pale yellow
DENSITY (23.9 °C)	g/ml	1.03
FLASH POINT	°C	> 93.3
HSP (25 °C)	-	-
DISPERSION (δD)	(J/cm ³) ^{1/2}	15.17
POLAR (δP)	(J/cm ³) ^{1/2}	4.68
HYDROGEN BONDING (δH)	(J/cm ³) ^{1/2}	6.80
MELTING POINT / FREEZING POINT	°C	< -60
MOLECULAR	-	-
FORMULA	-	C ₁₀ H ₁₈ O ₄
WEIGHT	g/mol	202.25
PARTITION COEFFICIENT / LOG P (20 °C)	-	1.38
SOLUBILITY IN WATER (20 °C)	g/l	31.22
SURFACE TENSION (72 °F, 22.2 °C)	dyn/cm	31.03
VAPOUR PRESSURE	-	-

PROPERTY	UNIT	RESULT
20 °C	kPa	0.0039
25 °C	kPa	0.0060
VISCOSITY (DYNAMIC) (24 °C)	mPa·s	3.52

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

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