

**CAS Reg. No.:** 2052-15-5

**INCI NAME:** Butyl Levulinate

**DESCRIPTION:**

- Pure Ester-based Solvent
- 58% Biogenic Carbon (derived from agricultural waste) according to ASTM D6866-20
- Readily biodegradable
- Non-flammable, Non-combustible and Low volatile
- Non-corrosive, Non-sensitizing and Non-toxic
- Miscible in conventional organic solvents and water
- GRAS (Generally Recognized As Safe) rated substance; 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 d-limonene, dibasic esters, and glycol ethers
- Outstanding performance as a degreasing agent, bringing strong solvency across a broad range of organic functionalities with low to no foaming
- Strong polymer solvency able to dissolve a broad range of polymeric binders making it a powerful component for resin and pigment clean-up and removal operations

**APPLICATIONS:**

- Agrochemistry
- CASE
- Cosmetics & Personal care
- Home care
- Industrial cleaning

**PHYSICO-CHEMICAL PROPERTIES:**

PROPERTY	UNIT	RESULT
APPEARANCE	-	Clear liquid
AUTOIGNITION TEMPERATURE	°C	460 at 976 mbar
BOILING POINT	°C	237.8
COLOUR	-	Colourless to pale yellow
DENSITY (20 °C)	g/ml	0.974
FLASH POINT	°C	110
HSP (25 °C)	-	-
DISPERSION (δD)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	15.69
POLAR (δP)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	9.66
HYDROGEN BONDING (δH)	(J/cm <sup>3</sup> ) <sup>1/2</sup>	5.82
MELTING POINT / FREEZING POINT	°C	< -60
MOLECULAR	-	-
FORMULA	-	C <sub>9</sub> H <sub>16</sub> O <sub>3</sub>

PROPERTY	UNIT	RESULT
WEIGHT	g/mol	172.22
PARTITION COEFFICIENT / LOG P (20 °C)	-	1.435
SOLUBILITY IN WATER (20 °C)	g/l	12.97
SURFACE TENSION (20 °C)	dyn/cm	31.37
VAPOUR PRESSURE	-	-
20 °C	kPa	0.0032
25 °C	kPa	0.0049
VISCOSITY (DYNAMIC) (20 °C)	mPa·s	2.849
VISCOSITY (KINEMATIC) (20 °C)	mm <sup>2</sup> /s	2.924

**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	Red	NITRILE RUBBER	Red
ACRYLIC	Red	NYLON	Light Green
ADMIRALTY BRASS (CDA443)	Orange	POLYETHYLENE TEREPHTALATE	Orange
ALUMINIUM (Al2024 - T3)	Dark Green	POLYPROPYLENE	Light Green
ALUMINIUM (Al5083)	Dark Green	POLYVINYLCHLORIDE (PVC)	Red
ALUMINIUM (Al7075 - T6)	Dark Green	PVA	Red
BUTYL RUBBER	Yellow	PVDF	Yellow
CHLORINATED PVC	Red	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	Yellow	SILICONE	Orange
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	Dark Green
LDPE	Yellow	TYGON	Yellow
NEOPRENE	Red	VITON	Red

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