RE:CHEMISTRY® BY GFBIO

TECHNICAL DATA SHEET

PRODUCT NAME: RE:CHEMISTRY MOVE200

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.
- Classified as Non-corrosive, Non-sensitizing and Non-toxic.
- Miscible in conventional organic solvents and water.
- Butyl Levulinate is a GRAS (Generally Recognized As Safe) rated substance by FEMA and listed as Solvent in the Safer Chemical Ingredients List of US EPA Safer Choice.

PERFORMANCE:

- Sustainable replacement for many commonly used solvents.
- Strong polymer solvency able to dissolve a broad range of polymeric binders making it a powerful component for resin clean-up and removal operations.
- Outstanding performance as a degreasing agent, bringing strong solvency across a broad range of organic residues.

APPLICATIONS:

- Agrochemistry
- CASE
- Home care and 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
EVAPORATION RATE (n-BUTYL ACETATE = 1) [1]	-	< 0.01
FLASH POINT (CLOSED CUP)	°C	110
HSP (25 °C)	-	-
DISPERSION (δD)	$(J/cm^3)^{1/2}$	15.69
POLAR (δP)	$(J/cm^3)^{1/2}$	9.66

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PROPERTY	UNIT	RESULT
HYDROGEN BONDING (δH)	$(J/cm^3)^{1/2}$	5.82
MELTING POINT / FREEZING POINT	°C	< −60
MIR VALUE [2]	g O_3/g VOC	1.09
MOLECULAR	-	-
FORMULA	-	$C_9H_{16}O_3$
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 [3]	-	-
20 °C	kPa	0.0032
25 °C	kPa	0.0049
VISCOSITY (DYNAMIC) (20 °C)	mPa·s	2.849
VISCOSITY (KINEMATIC) (20 °C)	mm^2/s	2.924

[1] According to ASTM D3539.

[2] MIR = Maximum Incremental Reactivity (calculated).

[3] Calculated.

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		SILICONE	
GALVANIZED MILD STEEL (C1010)		STAINLESS STEEL (304L)	
GALVANIZED STEEL (G90)		STAINLESS STEEL (316L)	
HIGH DENSITY POLYETHYLENE		TEFLON	
LDPE		TYGON	
NEOPRENE		VITON	

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