



Safer and Sustainable Solvents for Coatings

Product Brochure - CASE sector



Safer Products

Step4Change - Sustainability@Brenntag

Step4Change is our way of ensuring that sustainability is always at the top ouf our agenda - and yours. We will continue to hold ourselves accountable for the good of our customers, our business and above all our planet.

Choose our Step4Change "Safer Products" for a safer and more sustainable future.

This product portfolio prioritizes environmental protection and saftey, with improved toxicity profiles and lower environmental impacts, compared to standard products in use.

This results in a lower CLP labelling, indicating that our products have been assessed and found to be less hazardous to human health and the environment. This can provide reassurance to users that they 're choosing a safer and more environmentally friendly option.

We 're dedicated to helping your business achieve sustainability by offering safer and environmentally friendly products.

Join us in our mission to create a better tomorrow.

Discover our safer and sustainable solvents

By using safer solvents in your formulation you improve safety and comfort for workers, both yours and your customers ´. Due to their excellent solubilizing power they are valuable alternatives for a range of more hazardous substances



Support needed?

Talk to us! We can help with state of the Art HSP prediction, tests in our modern lab for safer alternatives as well as blends for your application needs.



How to enhance safety and comfort for workers and environment?

Discover our safer and sustainable solvents

RE:CHEMISTRY Levulinate-based solvents have an excellent health, saftey and environmental profile. By using Levulinate-based solvents in your formulation you improve safety and comfort for workers, both yours and your customers ´. Due to their excellent solubilizing power they are valuable alternatives for a range of more hazardous substances. RE:CHEMISTRY Levulinate-based solvents are non aquatoxic as well as readily biodegradable and therefore contribute to protect our environment.

- Low volatility
- Non-flammable
- Non-corrosive,
- Non-sensitizing
- Eliminate vapour exposure risk
- · Eliminate the need and cost for dangerous goods transport and handling
- No aquatic toxicity
- All products are USDA Certified Biobased Products, GRAS (Generally Recognized As Safe) rated substances by FEMA (Flavor and Extract Manufacturers Association), and listed on EPA's Safer Chemical Ingredients List.
- Readily biodegradable (RE:CHEMISTRY SOLVE 100/RE:CHEMISTRY MOVE 200) or ultimately biodegradable (RE:CHEMISTRY CLEAN 300)



Levulinate-based solvents

Excellent performance in Coatings

RE:CHEMISTRY Levulinate-based solvents are produced from **second generation biomass feedstock**, by using state of the art patented process technologies. The resulting low product carbon footprint **contribute to your CO2 emission reduction targets.**

RE:CHEMISTRY solvents show excellent performance in Coatings:

- Effective at solubilising a wide range of resin types
- Miscible with most other commonly used solvents
- Offer formulation flexibility
- Increase the biogenic content in your formulation
- Ideal for formulating coatings with high solids content
- · Significantly reduce exposure hazard to user, allows compliance with regulations
- Used in coil coatings, construction and waterproofing, wood varnishes and lacquers, automotive and other transport, food barrier coatings



Safer solution for paint removal

Discover RE:CHEMISTRY Levulinate-based solvents

Levulinate-based solvents are excellent for cleaning production equipment and pipework as well as flushing through application equipment, cleaning spills or overspray and cured coatings removal. Especially RE:CHEMISTRY MOVE 200 shows strong polymer solvency and is able to dissolve a broad range of polymeric binders making it a powerful component for resin and pigment clean-up and removal operations.

Compared to traditional solvents, using Levulinate-based solvents will:

- Reduce associated VOCs from 100% to 0% for use in cleaning
- Eliminate flammability risk
- Eliminate vapour exposure risk
- Significantly reduce overall consumption
- · Consequently reduce the quantity of solvent to be transported and stored
- · Eliminate the need and cost for dangerous goods transport and handling



RE:CHEMISTRY SOLVE 100 - Ethyl levulinate (CAS 539-88-8)

Parameter	Unit	Result	Method
Appearance	(at 20 °C and 101.3 kPa)	light yellow, clear liquid	Quality Assessment
Boiling point	°C	205.8	Ramsay and Young apparatus
Flash point	°C	94	EU Method A.9 (closed cup).
Vapor pressure	kPa (at 25°C)	0.0183	Ramsay and Young apparatus
Solubility in water	g/L (at 20°C	170.7	OECD TG 105
Partition coefficient	(at 20°C)	0.324	OECD TG 107
Density	g/ml (at 20°C)	1.012	Oscillation method (1)

Benefits

Safer Products Profile

Non-flammable and Low volatile Non-corrosive, Non-sensitizing and Non-aquatoxic Readily biodegradable

Feedstock and Product carbon footprint (PCF)

Agricultural waste, second generation biomass feedstock.

Biogenic content: 100% (ASTM D6866-20 Method B) Very low product carbon footprint - data available on request

Excellent Performance as Solvent

Miscible with most organic solvents Able to dissolve a wide range of resins Performance competes well with traditional fossilbased solvents

Certificates

EU Eco Flower and Blue Angel compliant USDA Certified Biobased Product, GRAS* rated substance by FEMA*, and listed on EPA's Safer Chemical Ingredients List.



RE:CHEMISTRY MOVE 200 - Butyl levulinate (CAS 2052-15-5)

Parameter	Unit	Result	Measurement condition
Appearance	(at 20 °C and 101.3 kPa)	light yellow, clear liquid	Quality assessment
Boiling point	°C	237.8	Ramsay and Young Apparatus
Flash point	°C	110	ASTM D93 (closed-cup)
Vapor pressure	kPa (at 25°C)	0.0049	Ramsay and Young apparatus
Solubility in water	g/L (at 20°C)	12.97	OECD TG 105
Partition coefficient	(at 20°)	1.435	OECD TG 107
Density	g/ml (at 20°C)	0.974	Oscillation method (1)

Benefits

Safer Products Profile

Non-flammable and Low volatile Non-corrosive, Non-sensitizing and Non-aquatoxic Readily biodegradable

Feedstock & Product Carbon Footprint (PCF)

Agricultural waste, second generation biomass feedstock.

Biogenic content: 58% (ASTM D6866-20 Method B) Low product carbon footprint (PCF) - data available on request

Excellent Performance as Solvent

Outstanding performance as a degreasing agent, strong solvency across a broad range of organic functionalities with low to no foaming Powerful component for resin and pigment clean-up and removal operations

Certificates

EU Eco Flower and Blue Angel compliant USDA Certified Biobased Product, GRAS* rated substance by FEMA*, and listed on EPA's Safer Chemical Ingredients List.



RE:CHEMISTRY CLEAN 300 - Ethyl PG-Acetal Levulinate (CAS 5413-49-0)

Parameter	Unit	Result	Method
Appearance	(at 20°C and 101.3 kPa)	Pale yellow, clear liquid	Quality Assessment
Boiling point	°C	225.2	Distillation Method (1)
Flash point	°C	> 93.3	ASTM D7094 (closed-cup)
Vapor pressure	kPa (at 25°C)	0.0060	OECD TG 104
Solubility in water	g/L (at 20°C)	31.22	OECD TG 105
Partition coefficient	(at 20°C)	1.38	EPA OPPTS 830.7550
Density	g/ml (at 23.9°C)	1.03	OECD TG 109

Benefits

Safer Products Profile

Non-flammable and Low volatile, Non-irritant, Non-corrosive, Non-sensitizing and Non-aquatoxic - **CLP free** product Ultimately biodegradable

Feedstock & Product Carbon Footprint (PCF)

Agricultural waste, second generation biomass feedstock.

Biogenic content: 72% (ASTM D6866-20 Method B) Low product carbon footprint - data available on request

Excellent Performance as Solvent

Outstanding performance as a degreasing agent, strong solvency across a broad range of organic functionalities with low to no foaming Powerful component for resin and pigment clean-up and removal operations

Certificates

EU Eco Flower and Blue Angel compliant USDA Certified Biobased Product, GRAS* rated substance by FEMA*, and listed on EPA's Safer Chemical Ingredients List.



Contact us

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