

**OUR SCIENCE FOR YOUR FUTURE** 

# Bio Coasol Bio Coasol 290 Plus

Non hazardous, Biobased, Biodegradable and Non VOC Solvents for Coatings and related Industries



# Introducing Bio Coasol Technology

Ahead of it's time, SEQENS Custom Specialties has used Coasol technology in the production of Coasol and Coasol 290 Plus for over 10 years already. Both solvents are non VOC, no odour, biodegradable and non hazardous solvents that may be used to replace more traditional solvents and coalescing solvents in the coatings industry. On the back of the success of these two products we have now been able to incorporate the same Coasol Technology in two new BIO-RENEWABLE solvents, BIO COASOL and BIO COASOL 290 PLUS.



## Bio Coasol and Bio Coasol 290 Plus

Bio Coasol and Bio Coasol 290 Plus are now also manufactured using bio sourced raw materials

- Bio Coasol 62% Bio renewable content
- Bio Coasol 290 Plus 60% Bio renewable content

Both products are identical in chemistry to our petrochemical based products. This will enable existing customers to formulate/approve first on regular grades and then move later to the bio sourced products when needed, with the added benefit that there would be no further development work required to switch up and maintain all of the benefits of current Bio Coasol Technology.

#### About Bio Coasol Technology

Bio Coasol technology is a proprietary method of producing non-VOC solvents that provide many advantages over traditional solvent:

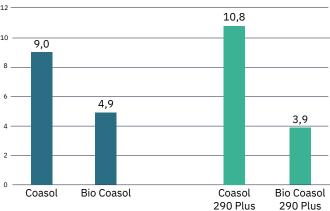
- Not classified as VOC's in EU
- Very low/no odour
- Biodegradable
- Non flammable

- Non hazardous
- Conform to the most stringent of clean air standards
- Globally registered\*
   \*Bio Coasol 290 Plus undergoing TSCA registration currently

#### **Carbon Footprint Reductions**

Bio Coasol and Bio Coasol 290 Plus offer up to a 64% reduction in carbon footprint. Further information and certificates are available on request

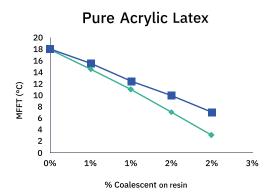
### CARBON FOOTPRINT KG CO2 EQ/KG

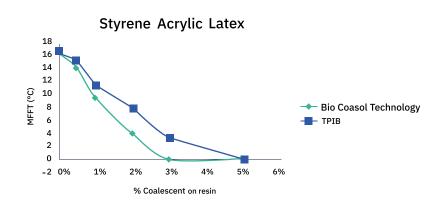


# Bio Coasol technology How does the coalescing solvent work?

Bio Coasol and Bio Coasol 290 Plus are first and foremost used as coalescing solvents in the water based coatings industry. The mode of interaction with the emulsified resin is different to other more common coalescents. Both Bio Coasol and Bio Coasol 290 Plus wrap themselves around and soften the extremities of the resin particle rather than completely saturate it. Ultimately this leads to less entrapment and improved efficiency in reducing the MFFT of the paint film, meaning less solvent is used vs conventional coalescing types.

#### Typically 20-50% less solvent can be used vs traditional TPIB coalescing solvent





#### **Very Low/ No Odour**

Bio Coasol Technology has very low/no odour meaning that true waterbased paints can now finally be formulated without any initial odour on application and no prolonged odour after application.

Feature	Benefits
Very low odour in comparison to other common coalescents and solvents	Helps create a low odour environment during application, meaning finished product can be applied with minimum disruption
	Maintains indoor air quality
	When used in paint it is possible to get back in the room sooner

# Bio Coasol 290 Plus – Formulating for Ecolabels and EN 16516 Compliance

Bio Coasol 290 Plus gives the user the additional benefit of being able to formulate products that will comply with EN 16516 testing requirements. This shows compliance of product emissions with the criteria of many of the voluntary specifications issued by most relevant ecolabels. Certified products are those with the best-in-class low emissions.

#### Other benefits



The features of Bio Coasol Technology means that it offers many benefits in other applications too.

Feature	Benefits
Based upon ester chemistry with a boiling point of 280°C (Bio Coasol) and 290°C (Bio Coasol 290 Plus)	Suitable for use in all water based formulations. Allows formulation of "VOC free" products according to EU regulation, helping reduce impact on the environment and achieve company sustainability objectives
	Can be used as an alternative to Solvent D60 and other organic solvents, to reduce the VOC of traditional solvent based products and aid with flow and levelling of high gloss solvent based coatings in both brush applied and aerosol formats
Excellent eco-toxicity profile	Future proof product development
	Non hazardous. Helps facilitate clean labelling of products (No symbols) Reduced transportation and packaging costs

Bio Coasol and Bio Coasol 290 Plus can also be used in a variety of other product types in a similar way to that when used in paints and coatings:

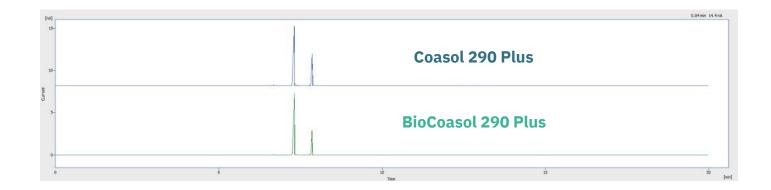
Other suitable end use application

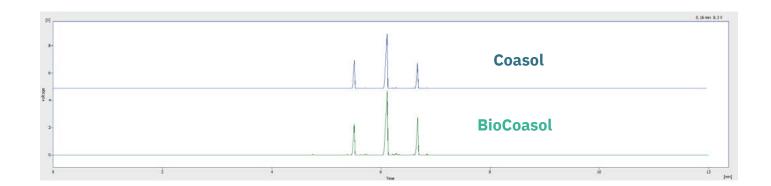
- Printing Inks
- Degreasers
- Raw materials for coatings industry
- Adhesives
- Graffiti removers
- Cleaning products

Product	Pack Size available
Bio Coasol and Bio Coasol 290 Plus	950KG IBC initially.

# Easy transition from Petrochemical Grades

For those customers already using Coasol and Coasol 290 Plus, it is an easy transition to the biosourced grades. The GC traces below show that the grades are identical, meaning that any development work required to change from one grade to another is minimised.







### **About SEQENS Custom Specialties**

SEQENS Custom Specialties is based in North East England UK, across two manufacturing sites with c. 70KT/year of production and c 200 employees. There are approximately 50 products both for its own production and those toll manufactured on behalf of our customers. SEQENS Custom Specialties still trades some products under the Chemoxy brand and we have a proud history of working with many of the largest global chemical organisations and supplying most of the world's largest coatings companies for more than 25 years.

SEQENS Custom Specialties manufactures a range of solvents suitable for use in the CASE industries globally. Specialising in reactive distillation, products are predominantly ester and alcohol-based chemistries and we have an ever increasing focus towards producing more environmentally benign products. We are a proud holder of the EcoVadis Platinum medal. This recognizes how the company is implementing actions and policies aligned with its sustainability ambitions.

The EcoVadis' methodology covers seven management indicators, across 21 sustainability criteria, in four themes: Environment, Labour & Human Rights, Ethics, and Sustainable Procurement



