smart
advanced manufacturing

KEMPROPOL

Smart Polyaspartic Coatings: Self-Healing, Thermally Conductive, and Anticorrosive Solutions for Sustainable Industrial Applications


smart
advanced manufacturing

ORGANISATION PROFILE

Kempro Group of Companies

Founded: 1991

Independent family-owned company

Over 30 years of sourcing experience and customer service

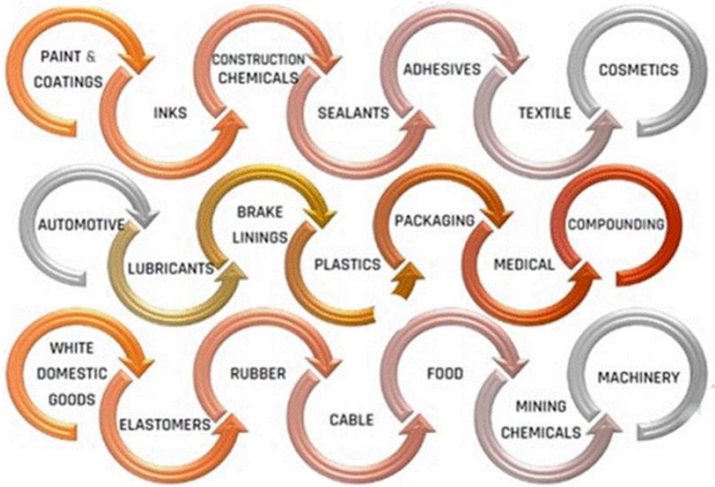
Over 25 years of manufacturing background

Birlik Organize Sanayi Bölgesi
1.Cadde No:22, 34953-Tuzla
İstanbul- Türkiye

www.kempro.com.tr

ORGANISATION PROFILE

Kempro Chemicals is the exclusive distributor of raw materials on behalf of 40+ global companies.



Kempropol Polymers is engaged in the production of specialty polymers on both solvent- and waterborne bases.

PRODUCT RANGE

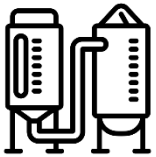
- Acrylic polyols
- Acrylic polymers & copolymers
- Saturated polyester resins
- Polyurethane resins
- Waterborne polyurethanes
- Waterborne acrylic systems
- Solvent-free and high-solids resins
- Energy-curable resins,
- Liquid resin systems for 3D printers
- Oil additives
- Functional coatings
- Performance additives

ORGANISATION PROFILE

85 Employees

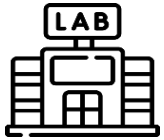
5000 sq. meter warehouse

2500 sq.meter production area



15.000 MT per annum production capacity

R&D Center supported by the Ministry of Industry and Technology of the Republic of Türkiye



700 sq. meter R&D Laboratory
300 sq. meter Application Laboratory
80 sq. meter QC Laboratıoy

Global reach
40+ countries

2024 Revenue
67.5 mln USD

Smart Polyaspartic Coatings: Self-Healing, Thermally Conductive, and Anticorrosive Solutions for Sustainable Industrial Applications

Vision: The main project goal is to develop smart, multifunctional, and environmentally friendly next-generation polyaspartic coatings that combine self-healing, thermal conductivity, and anticorrosive properties, providing long-lasting protection for industrial and infrastructure applications.

Motivation: Conventional anticorrosive coatings are often brittle, sensitive to moisture, and fail under thermal stress, resulting in high maintenance costs. Environmentally friendly polyaspartic ester-based coatings, enhanced with self-healing and thermal conductivity, provide a smart, durable, and sustainable solution that extends service life and enables predictive, digitally monitored protection.

Smart Polyaspartic Coatings: Self-Healing, Thermally Conductive, and Anticorrosive Solutions for Sustainable Industrial Applications

Expected outcome: The project will deliver long-lasting, self-healing, and thermally conductive next-generation polyaspartic coatings with enhanced anticorrosive protection across multiple sectors, including marine, energy, transportation, electronics, and construction. These coatings will reduce maintenance costs, support sustainable, environmentally friendly use, and enable real-time monitoring and predictive maintenance through digital twin integration, ensuring reliable, sector-specific performance.

Impacts: The project will enable smart, multifunctional polyaspartic coatings with longer service life, reduced maintenance, and improved reliability across marine, energy, transportation, electronics, and construction sectors. Its environmentally friendly formulation meets growing demand for sustainable solutions, while digital monitoring and predictive maintenance create opportunities for new service-based business models, enhancing competitiveness and revenue potential.

Schedule: Duration - 2 years
Start-at the earliest convenience

PARTNERS

Current Consortium: Kempropol Kimyasal ve Polimer Mad. San. ve Tic. A.Ş.

Partner search: We are looking for partners for the following stages of the Project:

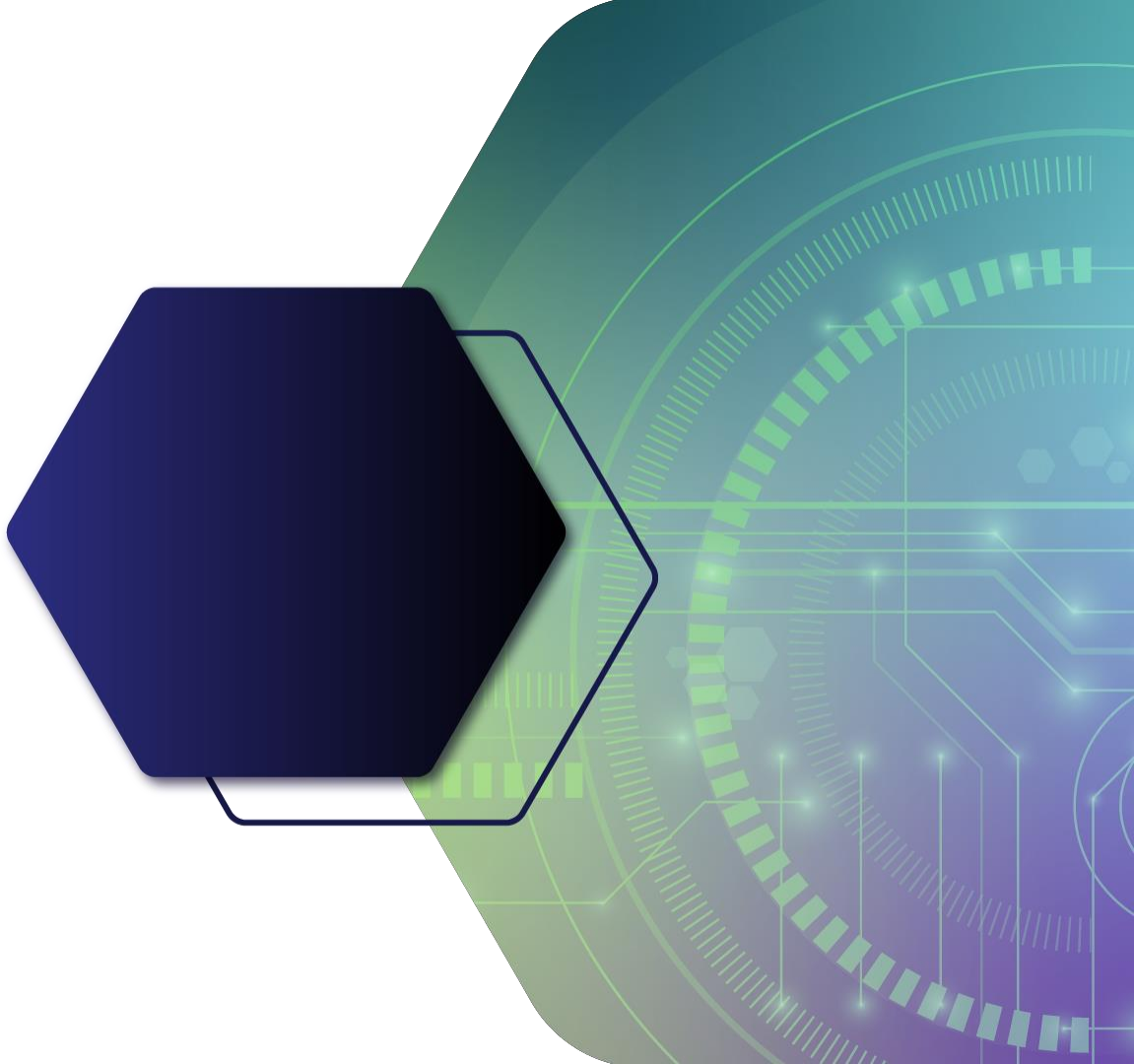
- the digital integration
- sustainability and lifecycle analysis
- field implementation studies.

CONTACT INFO

Contact info: Dr. SEBNEM CAMADANLI

sebnemcamadanli@kempro.com.tr

smart
advanced manufacturing



THANK YOU!

www.smarteureka.com