

# Addibond™ obtains Solar Impulse Efficient Solution Label

Solvay's Addibond™, which strengthens bonding between aluminum and adhesives in the automotive industry, is the 13th Solvay solution to receive the label

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Solvay's water-soluble <u>Addibond™ polymer</u>, used as a thin layer to strengthen bonding between aluminum and adhesives in automotive applications, has obtained <u>a Solar Impulse</u> <u>Efficient Solution Label</u>.

Founded by the Solar Impulse Foundation, the Solar Impulse Efficient Solution Label highlights existing solutions that are both sustainable and profitable. With the addition of Addibond<sup>TM</sup>, Solvay currently has 13 <u>labeled efficient solutions</u> which, in line with its <u>Solvay One Planet</u> goals, provide sustainable solutions for batteries, exhaust gas treatments, semiconductor applications, thermoset composites developed for high volume automotive applications, rare-earth-based formulations, biostimulants for farming, wastewater adsorbents, amongst others, benefiting various industries such as water, energy, and agriculture.

"Strengthening the metal-to-metal adhesive bond of aluminum parts allows automakers to reduce or eliminate the array of fasteners (nuts, bolts, screws, rivets) - a contributory factor for the light weighting of vehicles for better fuel and energy efficiency," says Dr Marie-Pierre Labeau, metal treatment platform project leader at Solvay. "This created a need for improving the reliability of metal-to-metal adhesive bonds, for which proper surface treatments are critical."

Solvay's Addibond<sup>™</sup> polymers are designed to deliver a surface pre-treatment that will maximize the strength of adhesive bonds by combining two functional groups: one reacting with the metal substrate, normally before it is shaped, and the other reacting with the adhesive during assembly.

Moreover, Addibond<sup>™</sup> helps component manufacturers and assemblers align their metal surface treatment with stricter HSE standards and regulations. The products are free of chromate, heavy metals, and fluorides, eliminating the risk of toxic exposure for operators.

For major weight reductions to be achieved, metal-to-metal adhesive bonding targets body-in-white (BIW), chassis, interior, powertrain, under-bonnet and other structural

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components such as electric vehicle (EV) battery casings and have already been successfully implemented in premium and mass production vehicle assemblies.

Addibond<sup>™</sup> polymers can be an effective enabler for leveraging the light-weighting potential of aluminum and other light metals in a wider range of industries such as construction, industrial equipment, electronics, and aerospace while also meeting higher standards of sustainability in the manufacturing processes.

The innovative benefits of Addibond<sup>™</sup> in adhesive bonding have been recognized multiple times in the industry and received the <u>Potier Prize in France</u> and the <u>Chinese Automotive award</u> in 2021 as a clean and profitable solution.

 $^{\mathsf{TM}}$  Addibond is a trademark of Solvay

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#### Media contact

Jun Wu Global Electronics & Industrial Marketing Communication Manager +86 13812 666118 Jun.wu1@solvay.com

#### **Business contact**

Julie Catteau-Mollet Global Marketing Director, Industrial process solutions julie.catteau-mollet@solvay.com

## **About Solvay**

Solvay is a science company whose technologies bring benefits to many aspects of daily life. With more than 21,000 employees in 63 countries, Solvay bonds people, ideas and elements to reinvent progress. The Group seeks to create sustainable shared value for all, notably through its Solvay One Planet roadmap crafted around three pillars: protecting the climate, preserving resources and fostering a better life. The Group's innovative solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, health care applications, water and air purification systems. Founded in 1863, Solvay today ranks among the world's top three companies for the vast majority of its activities and delivered net sales of €10.1 billion in 2021. Solvay is listed on Euronext Brussels and Paris (SOLB). Learn more at www.solvay.com.



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