

## Fields of application

### Aerospace/aeronautics

- Proof tests
- Disassembling on control (launchers)



### Automotive

- Glazing
- Body parts (composites, thermoplastics)



### Others

- Building sealants
- Machining fixing
- ...

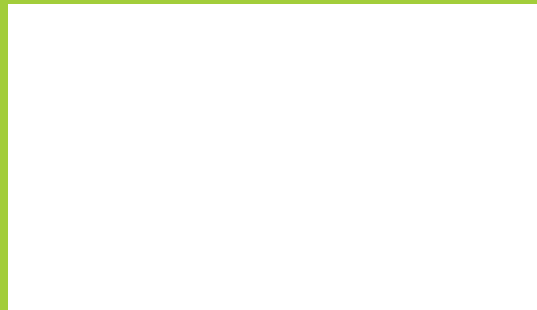


Reformulation of industrial references (adhesives), home-made adhesives or primers  
Implementation possible in epoxies, polyurethanes, silicones & UV adhesives

**Rescoll will provide you with a tailored adaptation to your bonding process**

More information: [www.rescoll.fr](http://www.rescoll.fr)

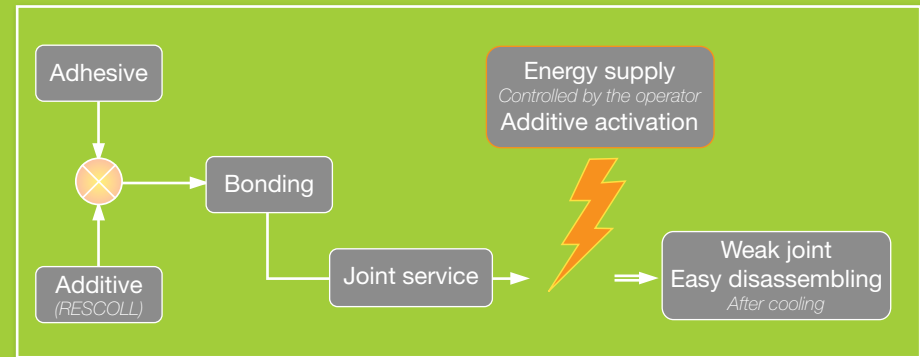
Contact : Maxime OLIVE  
[maxime.olive@rescoll.fr](mailto:maxime.olive@rescoll.fr)



## Industrial structural adhesives with innovative functionality : DISASSEMBLING

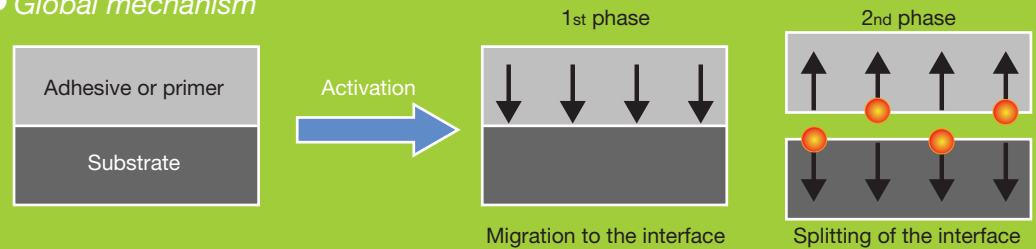
### — Modification of industrial adhesives with specific additives

- Patented process for dismantling of an adhesive joint

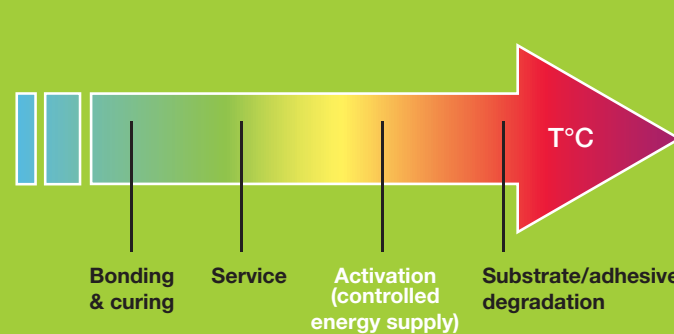


### — Dismantling on control by thermal activation

- Global mechanism



- Activation temperature tuned to the bonding specifications



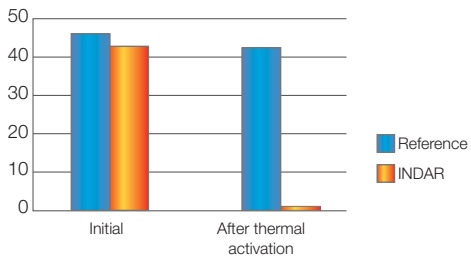
3 activation temperatures available



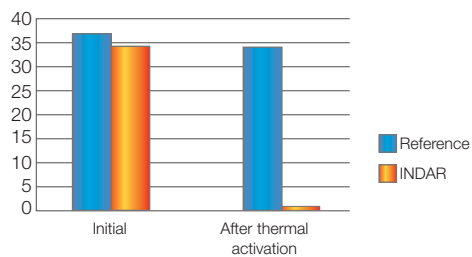
## Mechanical data

Ceramic bonded on metal alloy with 2K epoxy (industrial reference modified with INDAR)

Shear strength in MPa



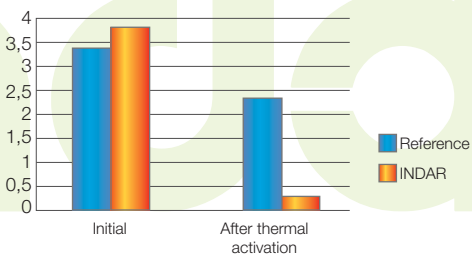
Pull out strength in MPa



Tempered glass bonded on metal with 1K polyurethane (industrial reference modified with INDAR)

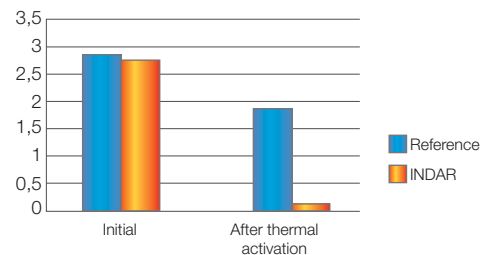
Peel failure type	Initial	After thermal activation
Reference	Cohesive in adhesive	Cohesive in adhesive
INDAR	Cohesive in adhesive	Adhesive between adhesive & glass

Pull out strength in MPa



PP bonded on SMC with 1K polyurethane (industrial reference modified with INDAR)

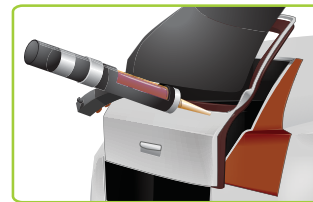
Shear strength in MPa



- No visual degradation or deformation of the PP substrate
- Clean surface of the SMC substrate

## Example of realization

Dismantling of tailgate (glazing and plastic body parts)  
An automotive success story, from lab to scale 1 validation !



### Bonding operation

No modification of shelf life and ageing of the adhesive formulation (H7, ...)



### Thermal activation

Adapted and localized energy delivery  
Scale 1 test of industrial energy sources



### Dismantling

Dismantling of scale 1 samples :  
backlite, PP skin and spoiler bonded on an SMC frame.  
Clean surfaces after dismantling :  
easier re-use & recycling

by RESCOLL



Application developed along with industrial partners



**Bonds that debond...**

An ecoconception of cars for further environmental friendly dismantling

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