

Designing better chemistry, right now

Beyond Surface Technologies AG

$\text{NaC}_2\text{H}_2\text{O}_3$
 $\text{NaC}_2\text{H}_2\text{O}_3$
Nacho

Taking a step back

We have...

- ✓ *More than 200 RSL's in place*
- ✓ *More than 170 Eco Labels in place*
- ✓ *More than 14 existing or planned chemical inventories*



... a watertight control system for textile chemicals in place – right ?

Facing unpleasant truths

- You can't control this industry!
- Goalposts will change
- It is complex



Designing better chemistry, right now !

- Eliminate risks rather than controlling them
- Reducing our impact on the environment
 - No/less crude oil based components - more renewable raw materials
 - No/lower hazards
 - Waste stream components
 - Less resources (water, energy...)
- No compromise on performance

To change, we need to

- Stop accepting inherent risks
- Dare to fail and start sweating
- Learn from other industries
- Create transparency on raw materials

TO
DO
GOOD
YOU
ACTUALLY
HAVE TO
DO
SOMETHING

Yvon Chouinard

Example – “wicking softener”

Think about creating a textile chemical based on chocolate-, hand cream-, soap- and biscotti ingredients...

Ingredients...

- we eat or rub into our skin
- which easily biodegrade
- that won't "impact" recycling



Is it possible ?

Performance



Safety



Cost



Is it possible ?

Performance

Safety

Cost

Present @

FIFA worldcup
Brazil 2014

Olympic Games
Brazil 2016

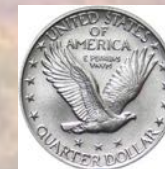
UEFA Euro 2016

USDA certified
biobased products

Greenscreened
components

Transparency on
Raw materials used

What is it
worth
to you, us ?



Available Today

Wicking 3rd generation

Moisture Management, plant seed active



Softness 2nd generation

Softener for denim and bottoms, plant seed based



DWR 1st Gen

PFC free durable water repellent



Bets for Tomorrow

Lower Resources

Technologies,
Processes that
will save water
and/or energy
i.e. UV curing,
liquid CO₂,
digital printing

New Raw Mat

Use of bio
waste stream
materials,
alternatives to
Palm oil
components,
adding
structure/partic
les to polymers

and ...

Supporting
initiatives for
recycling of
textiles