

CLARIANT

Public

Richard F. Haldimann Head Sustainability Transformation Group Innovation & Sustainability 27.08.2021

what is precious to you?

Clariant is a global leader in specialty chemicals serving a broad industry



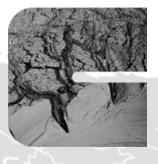
CARE CHEMICALS

Personal Care **Industrial Applications** Home Care **Crop Solutions Food Ingredients Encapsulation Technologies**



CATALYSIS

Catalysts **Biofuels & Derivatives**



NATURAL RESOURCES

Additives Oil Services Mining Solutions Refinery Services **Functional Minerals** 3 860

Sales 2020 (CHF m) from continuing operations

15.0%

EBITDA margin 2020 from continuing operations

13 235

Total staff 2020 (FTE) 1

85

Production sites worldwide in 2020 1, 2

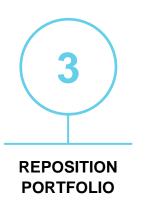
¹ Total Group incl. discontinued operations (excl. Business Unit Masterbatches) ² Shared production sites with Business Unit Pigments are split as separate sites



Sustainability and innovation are deeply embedded in our strategy











PEOPLE EXCELLENCE

Committed to contributing to

UN Sustainable Development Goals





















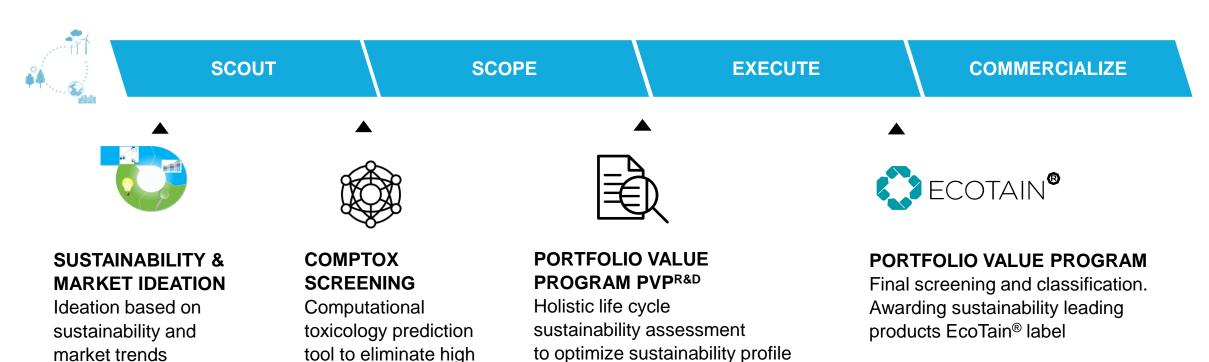




Hard wired sustainability into product development process for safe and sustainable by design innovation

CLARIANT'S IDEA TO MARKET PROCESS

risk lead structures



CLARIAN



A systematic approach for assessing sustainability and delivering best-in-class products

CLARIANT'S PIONEERING PORTFOLIO VALUE PROGRAM

Holistic, life-cycle thinking

36 criteria



PLANET



PEOPLE



PERFORMANCE



Raw materials and sustainable sourcing



Safe use, transparency and information



Integrated sustainable business



Resource efficiency and environmental protection



Addressing megatrends and social needs



Performance advantages



fulfil Clariant's sustainability definition and can be considered safe and sustainable by design



Braking fluids are keeping drivers safe but contain hazardous materials

CHALLENGE: MAKE BRAKING FLUIDS SAFER

Braking fluids are used by people in industrial and home environments



Borate ester is a key ingredient in conventional DOT 4 brake fluids to maintain performance in the use phase

Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Regulatory process names 2 CAS names 1 IUPAC names 6 Trade names 8 Other identifiers 2

Substance identity

EC / List no.: 250-418-4

CAS no.: 30989-05-0

Mol. formula: C21H45B012



Hazard classification & labelling

Warning! According to the classification provided by companies to ECHA in REACH registrations this substance is suspected of damaging fertility or the unborn child.



It is classified as Class 2 reprotoxic compound (CMR label), which during use is hydrolized to form free borate a Class 1 reprotoxic compound

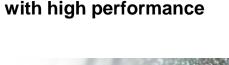
Tox study is ongoing and results are expected in 2021 – potential for re-classification of borate ester



Safebrake[®] Life was designed ensuring the safety of drivers and eliminating hazards to health and environment

SOLUTION: SAFEBRAKE® LIFE -

A sustainable DOT 4 brake fluid







Achieves a **state-of-the-art performance** exceeding the performance of borate estercontaining products on several criteria



The first CMR-label-free DOT 4 brake fluid – EcoTain® labelled for its outstanding sustainability performance



Consists of readily biodegradable materials, has a **low carbon footprint** and generates no hazardous waste in production or in use



Ready for the future. Customers don't have to worry about potential regulatory changes

Addressing megatrends, anticipating legislation

CHALLENGE: MICROPLASTICS

SOLUTION: LICOCARE® RBW VITA -

An innovative multi-purpose wax additive derived from sustainable bio-based raw material





Chemically and physically upgrading renewable raw material into high-performing Licocare® RBW Vita solutions for plastics, care, coatings, inks, agriculture and many other applications



»Vita« indicates natural origin of at least 98% renewable carbon index RCI



Contributes to more efficient and energy-saving production and recycling of plastics



Externally recognized:

- »Best Sustainable Product« ICIS Innovation Award 2020 | Gold Level Material Health Certificate
- OK compost INDUSTRIAL / OK biodegradable SOIL label



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Summary



To drive value creation with sustainability requires systematic integration of sustainability into the product development process.



Substitution calls for a holistic sustainability perspective.

To ensure improving a product does not lead to significant sustainability requires a holistic lifecycle-based sustainability assessment of the products. Scientific data remains the key assessment criteria for sustainability.



Collaboration with policy-makers and the broader stakeholder community is key to fostering design and innovation and accelerating the transition to a sustainable, low-carbon and more circular economy.

