

Home Care

**ECOTAIN® - SUSTAINABLE  
EXCELLENCE AT EVERY STEP**



# Ensuring **A CLEANER, GREENER FUTURE**

Efficient cleaning power is a given, but today consumers also expect their cleaning products to leave behind a much lighter environmental footprint. Eco-friendly, safe and sustainable products that use less energy and water are part of a general trend of environmental awareness. Greener, concentrated formulations, less packaging, effectiveness at low temperatures – these are the selling arguments that win over consumers today.

Clariant is committed to providing its partners in the home care industry with innovative ingredients that not only fulfill consumer needs but also deliver benefits during production.

Through its EcoTain® concept, Clariant combines its extensive expertise in cleaning solutions and surfaces with insight into consumer and customer needs. The result is a wide range of powerful ingredients for the home care industry that do their job sustainably, effectively and competitively.



ECOTAIN®



# We care **ABOUT HOME**



Ensuring that ingredients are safer for the people who work with them as well as for the end user and the environment is a primary concern of the EcoTain® concept. EcoTain® home care ingredients have a much friendlier composition, avoiding substances of concern. The concept also involves careful sourcing of raw materials with the focus on renewable resources wherever possible. Because 'less is more', multifunctional products are preferred in order to reduce the complexity of formulations, as are strategies to reduce energy and water consumption during production and application. And to cut the costs of logistics and transportation along with their environmental consequences, EcoTain® products are produced in multiple sites around the world. Clariant cares about home.

# The EcoTain<sup>®</sup> LIFE CYCLE

In its four-stage life-cycle concept that covers ingredient composition, manufacturing, formulation & application, and disposal, EcoTain<sup>®</sup> applies measurable criteria to document the sustainability profile of its products.

## **Sustainable Design**

Sustainable thinking starts in the development stage of a product with its design. Our aim is to develop efficient products based on safer ingredients while maximizing use of renewable raw materials.

## **Responsible Process**

It continues with the implementation of a responsible process. Sustainable production means safer processes with less impact on the environment that help to conserve resources. During this phase, we aim to improve the efficiency of chemical processes during production.

## **Safer & Efficient Use**

The third stage of the EcoTain<sup>®</sup> life cycle focuses on safer and efficient use, with the spotlight on advantages and benefits during formulation and final application. Not only should products fulfill their designated purpose, but they should also contribute to improving end-product performance and be safer in any given application.

## **Eco Integration**

The last stage of the EcoTain<sup>®</sup> life cycle is eco-integration – product disposal and the impact it has on the environment. First we look at minimizing waste, then we ensure that if possible waste products are recycled according to environmentally friendly principles. The environmental properties of our products are continuously scrutinized and improved.



# EcoTain®

## LIFE CYCLE CRITERIA

Below are just some of the criteria that contribute to defining the EcoTain® label at Clariant. The criteria apply selectively, depending on the product and the process. For a product to be awarded the EcoTain® label by Clariant, it should present benefits at every phase of its life cycle. And naturally it is Clariant's aim to ensure that the maximum of criteria come into play in order to live up to our goal of sustainable innovation.



### Sustainable DESIGN

- Friendlier non-hazardous material,
- No substances of concern<sup>1</sup>,
- Use of raw materials from renewable feedstocks<sup>2</sup>,
- Use of raw materials from certified sources<sup>3</sup> and/or
- Low or no release of volatile organic compounds (VOC)



### Responsible PROCESS

- Yield efficient production,
- Reduced waste generation,
- Energy<sup>4</sup>- & water-efficient production,
- Certified for safety & quality<sup>5</sup>,
- Reduced transport due to multiple production sites all over the world and/or
- Roundtable on Sustainable Palm Oil (RSPO) supply chain certification



### Safer & Efficient USE

- Improved human tox profile<sup>6</sup>; no skin or eye irritation,
- Reduced formulation complexity due to multi-functionality,
- Easy to handle and/or process,
- Formulation/application efficiency<sup>7</sup>,
- Compatible with ecolabel criteria<sup>8</sup> and/or
- Suitable to replace undesired substances in formulation<sup>9</sup>



### Eco INTEGRATION

- Improved environmental profile<sup>10</sup>,
- Reduced effect on aquatic environment,
- Good environmental integration due to renewable feedstock and/or
- Biodegradable<sup>11</sup>

1 For example: NPEO-free (free of nonylphenol ethoxylates), phosphate-free.

2 Bio-based content measured by the Renewable Carbon Index (RCI). The RCI defines the share of renewable carbons within the

3 Free of tristyrol phenol ethoxylate.

4 ISO 50001:2009 Energy Management System.

5 ISO 14001:2004 Environmental Management System, OHSAS 18001: 2007 Occupational Health and Safety Assessment System, ISO 9001: 2008 Quality Management System.

6 No human hazard label according to Globally Harmonized System (GHS).

7 Ingredients boosting performance of formulation though properties such as being efficient at low concentrates, increasing efficacy of active ingredient, reducing number and/or volume of other components.

8 For example: Nordic Swan, Ecocert.

9 For example: replace solvents, phosphates or NPEOs.

10 No environmental hazard label according to Globally Harmonized System (GHS).

11 According to OECD standards.



## How EcoTain® **CAN HELP YOU**

More and more consumers prefer to use green detergents and cleaners in their home. They want products that are safe and more ecological – without compromising on quality or performance.

To help you meet your customers' needs in terms of more friendly, more responsible products as well as your own company targets for sustainability, take advantage of Clariant ingredients that bear the EcoTain® label. EcoTain®-approved products use fewer resources, are safer and still effective. You can be sure you are using a product produced according to more sustainable, eco-friendlier and efficient standards.

# EcoTain<sup>®</sup> products for the **HOME CARE MARKET**

## **SURFACTANTS**

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- GlucoPure™ Foam
- GlucoPure™ Deg
- GlucoPure™ Wet

## **SOIL RELEASE POLYMERS**

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- Texcare® SRN 170
- Texcare® SRN 240
- Texcare® SRA 300 F

## **RHEOLOGY MODIFIERS**

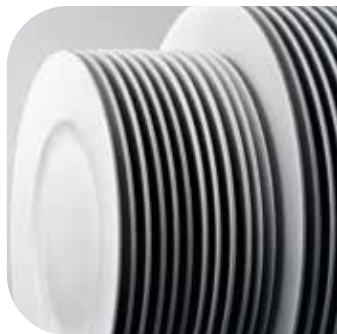
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- Hostagel® VB

## **BLENDS & BOOSTERS**

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- Genopur® GSC

## **SOLVENTS**

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- Genapol® BA 040





# Glucopure™ Foam

- Glucopure™ Foam is a sugar-based surfactant for Hand Dishwashing Liquid Detergents
- It presents foam and cleaning boosting properties
- It presents a very mild profile for the skin



### Sustainable DESIGN

#### INGREDIENT COMPOSITION

- Based on 95% natural, renewable resources
- Vegetable origin (sugar, coconut oil)



### Responsible PROCESS

#### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (100% atom economic)
- Minimized waste generation
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production according to ISO 50001



### Safer & Efficient USE

#### INGREDIENT FORMULATION

- Multifunctionality (excellent foam, viscosifying and refatting effect) reduces formulation complexity
- Mild surfactant for liquid detergents with enhanced skin compatibility
- Reduced number or volume of other ingredients in formulation



### Eco INTEGRATION

#### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life
- Good environmental integration due to renewable feedstock
- Readily biodegradable (biodegradation >80% in 28 days according to OECD 301 B)

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Please refer to page 6 for a more detailed description of criteria



# GlucoPure™ Deg

- GlucoPure™ Deg is a sugar-based surfactant for Hand Dishwashing Liquid Detergents
- It presents degreasing and cleaning boosting properties
- It presents a very mild profile for the skin



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Based on 95% natural, renewable resources
- Vegetable origin (sugar, hydrophobe alternatively from coco or palm oil)



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (approx. 90%)
- Minimized waste generation
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- RSPO Mass Balance Certification (CU-RSPO SCCS-805724)
- Energy efficient production according to ISO 50001



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Multifunctionality (excellent foam, viscosifying and degreasing effect) reduces formulation complexity
- Mild surfactant for liquid detergents with enhanced skin compatibility
- Reduced number or volume of other ingredients in formulation



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life
- Good environmental integration due to renewable feedstock
- Readily biodegradable (biodegradation >80% in 28 days according to OECD 301 B)

Please refer to page 6 for a more detailed description of criteria



# Glucopure™ Wet

- Glucopure™ Wet is a sugar-based surfactant for Hard Surface Cleaners
- It presents wetting boosting properties to facilitate and increase the cleaning performance
- It is mild to the plastic materials present in every house



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Based on 95% natural, renewable resources
- Vegetable origin (sugar, hydrophobe alternatively from coco or palm oil)



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (approx. 90%)
- Minimized waste generation
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- RSPO Mass Balance Certification (CU-RSPO SCCS-805724)
- Energy efficient production according to ISO 50001



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Multifunctionality (excellent foam and solubilizing effect) reduces formulation complexity
- Mild surfactant for hard surface cleaners with enhanced skin compatibility
- Reduced number or volume of other ingredients in formulation
- Easy to handle (low viscosity liquid) and to process (cold-processable)



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life
- Good environmental integration due to renewable feedstock
- Readily biodegradable (biodegradation >80% in 28 days according to OECD 301 B)

Please refer to page 6 for a more detailed description of criteria



# Texcare<sup>®</sup> SRN 170

- Texcare SRN 170 is a soil release polymer for liquid detergents with multifunctional properties
- The product delivers fabric hydrophilization and reduces the redeposition of soils



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Friendlier, non-hazardous material



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (>85%) to avoid waste during manufacturing
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production
- Global production (USA, Spain) helps to reduce transport



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Highly efficient at low concentrates and suitable for super concentrate formulations, which helps to save detergent and water
- Increases the efficacy of the detergent and helps to reduce the active content (volume of surfactant), thus saving resources
- Anti-greying due to easy stain removal, also at low temperature wash (30°C), saving energy
- Product multifunctionality helps to reduce complexity of formulation
- Safer use due to improved human tox profile, i.e. non-irritant to eye or skin, non-sensitizing
- Compatible with Nordic Swan criteria
- Easy to handle (liquid)



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life (LC50 > 79 mg/l)
- Readily biodegradable (Biodegradation 79% in 28 days according to OECD 301 B)

Please refer to page 6 for a more detailed description of criteria



# Texcare<sup>®</sup> SRN 240

- Texcare SRN 240 is a soil release polymer for liquid detergents with multifunctional properties
- The product delivers fabric hydrophilization and reduces the redeposition of soils



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Friendlier, non-hazardous material



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (>85%) to avoid waste during manufacturing
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production
- Global production (USA, Spain) helps to reduce transport



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Highly efficient at low concentrates and suitable for super concentrate formulations, which helps to save detergent and water
- Increases the efficacy of the detergent and helps to reduce the active content (volume of surfactant), thus saving resources
- Anti-greying due to easy stain removal, also at low temperature wash (30°C), saving energy
- Product multifunctionality helps to reduce complexity of formulation
- Safer use due to improved human tox profile, i.e. non-irritant to eye or skin, non-sensitizing
- Compatible with Nordic Swan criteria. Listed under "Cleangredients.com"
- Easy to handle (liquid)



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life (LC50 > 220 - 500 mg/l)
- Biodegradable (Biodegradation 60-70% according to OECD 301 E)

Please refer to page 6 for a more detailed description of criteria



# Texcare<sup>®</sup> SRA 300 F

- Texcare SRA 300 F is a soil release polymer for powder detergents with multifunctional properties
- The product delivers fabric hydrophilization and reduces the redeposition of soils



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Friendlier, non-hazardous material



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (>85%) to avoid waste during manufacturing
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production
- Global production (USA, Spain) helps to reduce transport



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Highly efficient at low concentrates and suitable for super concentrate formulations, which helps to save detergent and water
- Increases the efficacy of the detergent and helps to reduce the active content (volume of surfactant), thus saving resources
- Anti-greying due to easy stain removal, also at low temperature wash (30°C), saving energy
- Product multifunctionality helps to reduce complexity of formulation
- Safer use due to improved human tox profile, i.e. non-irritant to eye or skin, non-sensitizing



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life (LC50 > 220 mg/l)
- Biodegradable (Biodegradation 66% in 28 days according to OECD 302 B)

Please refer to page 6 for a more detailed description of criteria





# Hostagel<sup>®</sup> VB

- Hostagel VB is a rheology modifier polymer for liquid detergents
- The product breaks the viscosity of liquid detergents, allowing formulations without VOC solvents



### Sustainable DESIGN

#### INGREDIENT COMPOSITION

- Friendlier, non-hazardous material
- VOC-free material



### Responsible PROCESS

#### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield (> 85%) to avoid waste during manufacturing
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production
- Global production (USA, Spain) helps to reduce transport



### Safer & Efficient USE

#### INGREDIENT FORMULATION

- Rheology modifying properties can substitute solvents
- Highly efficient viscosity breaker for super concentrate formulations, which helps to save detergent and water
- Product multifunctionality helps to reduce complexity of formulation
- Safer use due to improved human tox profile, i.e. non-irritant to eye or skin, non-sensitizing
- Compatible with Nordic Swan criteria
- Easy to handle (liquid)



### Eco INTEGRATION

#### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life (LC50 > 79 mg/l)
- Readily biodegradable (Biodegradation 79% in 28 days 301 B)

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Please refer to page 6 for a more detailed description of criteria



# Genopur<sup>®</sup> GSC

- Genopur GSC is a surfactant for automatic dishwashing powders and tabs and can be used as a surfactant in rinse aid products
- It is suitable for phosphate-free formulations



## Sustainable DESIGN

### INGREDIENT COMPOSITION

- Based on 100% natural, renewable resources
- Vegetable origin (sorbitol and coconut oil)
- VOC-free material



## Responsible PROCESS

### INGREDIENT MANUFACTURING

- Resource efficiency due to high yield
- Minimized waste generation
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- RSPO Mass Balance Certification (CU-RSPO SCCS-805724)
- Energy efficient production



## Safer & Efficient USE

### INGREDIENT FORMULATION

- Suitable for phosphate-free formulations
- Safer use due to improved human tox profile, i.e. non-irritant to eyes or skin
- Ingredient is Ecocert™ certified
- Easy to handle (liquid)



## Eco INTEGRATION

### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Good environmental integration due to renewable feedstock
- Reduced effects on aquatic life (LC50 > 100 mg/l)
- Readily biodegradable (biodegradation 88% in 28 days according to OECD 301 B)

Please refer to page 6 for a more detailed description of criteria



# Genapol<sup>®</sup> BA 040

- Solvent with oil emulsification properties for hard surface cleaning
- Oil emulsification and rheology modifying properties for laundry detergents



### Sustainable DESIGN

#### INGREDIENT COMPOSITION

- VOC-free material



### Responsible PROCESS

#### INGREDIENT MANUFACTURING

- Resource efficiency due to 100% yield
- Minimal waste generation
- Certified for safety & quality according to ISO 9001, ISO 14001 and OHSAS 18001
- Energy efficient production



### Safer & Efficient USE

#### INGREDIENT FORMULATION

- Highly efficient at low concentrations
- Excellent replacement for volatile VOC solvents (such as glycol ethers) without performance loss
- Product multifunctionality helps to reduce complexity of formulation
- Easy to handle (liquid)



### Eco INTEGRATION

#### INGREDIENT ENVIRONMENTAL FATE

- Improved environmental profile
- Reduced effects on aquatic life (LC50 > 100-500 mg/l)
- Readily biodegradable (Biodegradation 80% according to OECD 301 B)

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Please refer to page 6 for a more detailed description of criteria





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