LEVACO CHEMICALS

# SOLUTIONS FOR INDUSTRIAL & INSTITUTIONAL CLEANING

# INTRODUCTION

LEVACO stands for decades of experience and expertise in the development and production of innovative solutions. With a strong commitment to quality, sustainability, and customized applications, LEVACO provides surfactants for various industries, including agrochemicals, food production and cleaning solutions.

Utilizing state-of-the-art production methods and rigorous quality control measures, LEVACO ensures that its surfactants not only deliver outstanding quality and performance but are also environmentally friendly and sustainable. The company prioritizes renewable raw materials and continuously advances research and development to create surfactants that meet the highest industry standards.

With certified, high-quality products, LEVACO is the ideal partner for companies seeking reliable and innovative surfactants — whether for industrial applications or consumer products.



## LEVACO – FLEXIBLE, AGILE AND CUSTOMER-FOCUSED

At LEVACO, your requirements are our number one priority. Our flexibility and agility enable us to develop customized solutions - quickly, efficiently and reliably. Whether in product development, order handling or customer service: our dedicated team responds quickly and works with you every step of the way. Together we create added value — customised, straightforward and of the highest standard.

## TAILOR-MADE SURFACTANTS FOR MAXIMUM EFFICIENCY

LEVACO's customized surfactants are designed to meet precise formulation requirements, balancing factors such as hydrophilic-lipophilic balance (HLB), emulsification efficiency and foam stability. By selecting surfactants perfectly suited to specific applications, efficiency can be improved and reduce overall raw material usage, ultimately leading to a more sustainable and cost-effective production.

## THE ROLE OF NON-IONIC SURFACTANTS IN THE INDUSTRY

Non-ionic surfactants are essential in many industrial applications, from chemical and agrochemical processes to food production applications. Their neutral charge makes them exceptionally stable and adaptable across various pH ranges, while offering benefits like excellent skin compatibility and low irritation potential. As a result, they are widely used in detergents, emulsions and lubricants. Join us in discovering their potential and the innovative solutions LEVACO can provide.

## HIGH-QUALITY, SUSTAINABLE SURFACTANTS

Using state-of-the-art production methods and rigorous quality control, LEVACO ensures its surfactants deliver outstanding performance while prioritizing environmentally friendly practices. We focus on renewable raw materials and continuously invest in research and development. The result: certified, high-quality products that meet the highest industry standards.



# OUR CERTIFICATES

RSPO

Responsible Care

EU organic certification

Halal Control

KLBD (Kosher certified)

Authorized Economic Operator

Certified Management System

# ISCC PLUS

The ISCC Plus (International Sustainability & Carbon Certification Plus) is an internationally accepted system that helps companies establish sustainable, traceable supply chains. It ensures that products and raw materials are obtained from sustainable sources and meet environmental and social standards.

With the ISCC Plus certification, companies can transparently communicate their climate goals and provide verifiable proof of product origin, building trust with consumers and business partners.

Since 2024 LEVACO has been successfully certified for using bio-circular ethylene oxide (EO) to offer an almost infinite variety of sustainable products to meet your requierements. The correct and unique allocation of the bio-circular EO to the end product is guaranteed by the mass balance approach implemented at LEVACO.

# I&I PRODUCT PORTFOLIO

In industrial and institutional (I&I) cleaning, performance, process efficiency, and foam control are essential. Whether you are developing high-performance cleaners for food processing, industrial equipment, hard surfaces, or technical applications, LEVACO helps you turn complex formulation challenges into reliable solutions.

With alkoxylation as one of our core competencies, we develop surfactants with precisely tailored properties – from HLB value and wetting performance to detergency, emulsification, alkali stability, and foam profile. As specialists in low-foaming products, we understand the demands of modern cleaning processes and help you achieve effective cleaning results without unwanted foam.

This alkoxylation expertise is complemented by a broad range of chemical R&D and production capabilities. Our facilities handle sophisticated multi-step reactions and customized synthesis routes efficiently, enabling us to create tailor-made solutions for your specific formulations, raw materials, and process conditions.

All EO- and/or PO-based products in this brochure are also available as ISCC PLUS certified versions upon request.

# CLOUD POINT METHODS

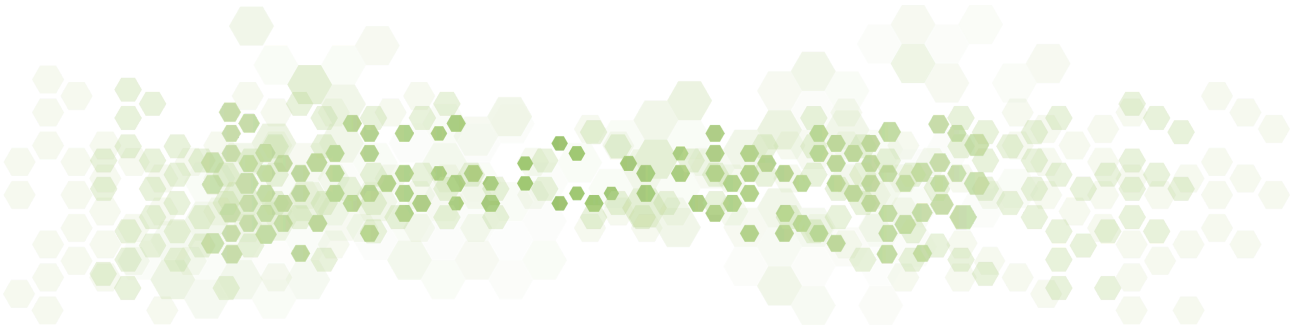
| | |
|---|---|
| **Method A** | 1% in deionized water |
| **Method B** | 1% in 5% NaCl solution |
| **Method C** | 1% in 10% NaCl solution |
| **Method D** | 5 g + 45 g 25% BDG solution |
| **Method E** | 5 g + 25 g 25% BDG solution |
| **Method F** | 2% in 10% NaCl solution |
| **Method G** | 1 g + 99 g 15% BDG solution |
| **Method H** | 50% in deionized water |

# ECO-PROFILE LEGEND

| | |
|---|---|
| **Biodegradable** | Readily biodegradable according to OECD 301 (≥60% in 28 days) |
| **DID-Listing - x*** | Listed with conditions: proof of aerobic degradability is required (DID 2603, block polymers) |

# COMMERCIAL LAUNDRY

For professional laundry systems, LEVACO offers a broadly coordinated portfolio of Guerbet alcohol ethoxylates and alkoxylates, as well as EO/PO surfactants and phosphate esters. These products support the development of high-performance laundry, stain-removal and fabric-softener formulations with targeted wetting, soil removal and dispersion properties. The formulation system requirements relating to biobased content, biodegradability, environmental labels and temperature behaviour can be addressed through suitable product and cloud-point profiles.



# PRODUCT SPOTLIGHT

**Lucramul OMA 09**
secondary surfactant, thickening, controlled foam

**Lucrachem S 02**
narrow-range ethoxylate, low odour, controlled foam

**Lucraclean PHEO LF 50**
low foaming alkoxylate, degreasing stain remover suitable

**Lucraclean PHEO 90**
versatile alkoxylate, suitable for a broad range of applications

# COMMERCIAL LAUNDRY

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | |
|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL DETERGENT | STAIN REMOVER |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | |
| **Lucramul OMA 09** | C16-18 fatty acid amide, 9 EO | 61 (F) | x | x | | x | |
| **Lucramul OMA 14** | C16-18 fatty acid amide, 14 EO | 45 (E) | x | x | | x | |
| **Lucraclean PHEO LF 50** | Guerbet Alcohol Alkoxylate (5 EO) | 60 (E) | | x | | x | x |
| **Lucraclean PHEO LF 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | |
| **Lucraclean PHEO LF 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | |
| **Lucraclean PHEO LF 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | | x | |
| **Lucraclean PHEO 30** | Guerbet Alcohol Ethoxylate (3 EO) | 31(E) | | x | x | x | x |
| **Lucraclean PHEO 40** | Guerbet Alcohol Ethoxylate (4 EO) | 44 (E) | | x | x | x | x |
| **Lucraclean PHEO 50** | Guerbet Alcohol Ethoxylate (5 EO) | 56 (E) | | x | x | x | x |
| **Lucraclean PHEO 70** | Guerbet Alcohol Ethoxylate (7 EO) | 68 (E) | | x | | x | x |
| **Lucraclean PHEO 80** | Guerbet Alcohol Ethoxylate (8 EO) | 56 (A) | | x | x | x | |
| **Lucraclean PHEO 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | x | x | |
| **Lucrachem S 01** | 2-Ethylhexanol, 4 EO (narrow range) | 52 (E) | | x | | x | x |
| **Lucrachem S02** | C9/11 alcohol, 4 EO (narrow range) | 57 (E) | | x | | x | x |

# FOOD SERVICE & KITCHEN HYGIENE

For food service and kitchen hygiene, LEVACO develops surfactant solutions for hard surfaces, oven and grill degreasing, manual and machine dishwashing, and rinse-aid formulations. Alkyl polyglucosides, fatty alcohol alkoxylates, Guerbet-based surfactants and EO/PO systems offer differentiated combinations of wetting, cleaning performance, foam control and rinsing behaviour, depending on their structure. This allows formulations to be tailored to the type of soil, water quality, temperature and desired process profile.



# PRODUCT SPOTLIGHT

**Lucramul VLF 04**
specialised polyglycol ether, low foaming, rinse-aid (ADW)

**Lucramul WT 300**
good rinsing, low foaming

**Lucraclean WT 54**
low foaming alkoxylate, rinse aid, versatile applications

**Lucramul VLF 01**
low foaming, cold process additive

# FOOD SERVICE & KITCHEN HYGIENE

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | HARD SURFACE CLEANING | DEGREASER (OVEN & GRILL) | SINK WASH | AUTOMATIC DISHWASHING | RINSE AID |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | x | | |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | x | | x | |
| **Lucraclean WT 36** | C12-14 Fatty Alcohol (3EO & 6PO) | 11 (A) | x | x | | x | | | x | x |
| **Lucraclean WT 54** | C12-14 Fatty Alcohol (5EO & 4PO) | 41 (E) | x | x | | x | | | x | x |
| **Lucraclean WT 44** | C10-12 Fatty alcohol (4EO & 4PO) | 36,5 (E) | | x | | x | | | x | x |
| **Lucramul 185 DB** | C16-18 and C18 unsaturated (5 EO) | 67 (E) | x | x | | x | | | x | |
| **Lucramul 2407** | 12-14 Fatty Alcohol (7 EO) | 60 (A) | x | x | x | x | | | x | |
| **Lucraclean LF 52** | Alcohol Alkoxylate | 41 (E) | | x | x | | | | | x |
| **Lucraclean LF 64** | Alcohol Alkoxylate | 38 (A) | | x | | | | | | x |
| **Lucrachem VLF 01** | Alcohol Alkoxylate | 25 (D) | x | x | | x | x | | x | x |
| **Lucrachem VLF 04** | Modified Fatty Alcohol Polyglycolether | 49,5 (E) | | x | | | | | x | x |
| **Lucramul WT 300** | C13 Oxo Alcohol Alkoxylate | 44 (A) | | x | | | | | x | x |
| **Lucramul C13/10** | Tridecyl Alcohol Ethoxylate (10 EO) | 82 (A) | | x | x | x | | | x | |
| **Lucramul C13/8** | Tridecyl Alcohol (9 EO) | 58 (A) | | x | x | x | | | x | |
| **Lucramul ITD 8** | C13 Oxo Alcohol (8 EO) | 60 (A) | | x | x | x | | | x | |
| **Lucramul WT 100** | Guerbet Alcohol EO/PO | 66 (G) | | | | x | x | | x | |
| **Lucramul WT 110** | Guerbet Alcohol EO/PO | 52,5 (D) | | x | | x | x | | x | |

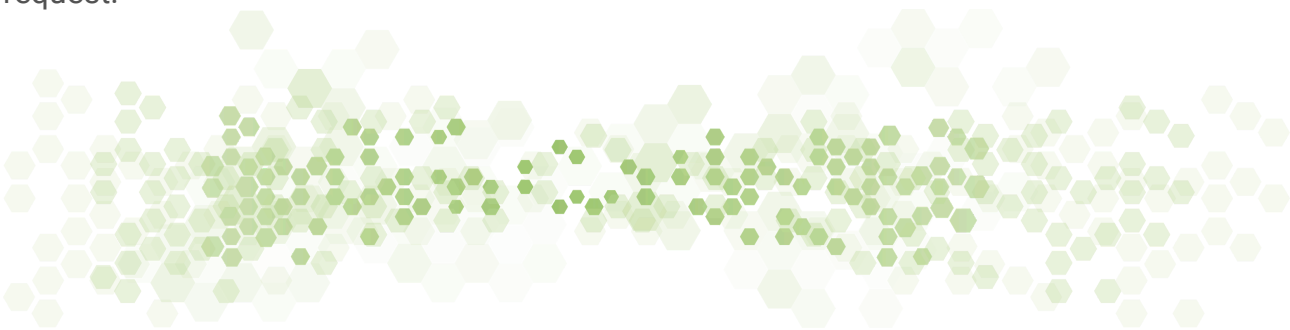
# FOOD SERVICE & KITCHEN HYGIENE

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | HARD SURFACE CLEANING | DEGREASER (OVEN & GRILL) | SINK WASH | AUTOMATIC DISHWASHING | RINSE AID |
| **Lucraclean PHEO LF 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | | | x | |
| **Lucraclean PHEO LF 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | | | x | |
| **Lucraclean PHEO LF 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | | x | | | x | |
| **Lucraclean PHEO 70** | Guerbet Alcohol Ethoxylate (7 EO) | 68 (E) | | x | x | x | | | x | |
| **Lucraclean PHEO 80** | Guerbet Alcohol Ethoxylate (8 EO) | 56 (A) | | x | x | x | | | x | |
| **Lucraclean PHEO 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | x | x | | | x | |
| **Lucrachem EPC 06** | reverse EO/PO Block Copolymer, 40% EO | 46 (A) | | x | x* | | | | | x |
| **Lucrachem EPC 11** | reverse EO/PO Block Copolymer, 20% EO | 29 (A) | | x | x* | | | | | x |
| **Lucrachem BEP 01** | Butyl EO/PO | 66 (E) | | | | x | | | | x |
| **Lucrachem BEP 02** | Butyl EO/PO | 56 (H) | | x | | x | | | | x |

# FOOD & BEVERAGE PROCESSING

Cleaning solutions for food and beverage processing must provide reliable wetting, remove organic and inorganic residues, and perform consistently in a range of process concepts. LEVACO offers nonionic surfactants like EO/PO systems and phosphate esters for general cleaning, bottle washing, cleaning-in-place, open-plant cleaning, and oven and grill degreasing. Selecting products according to chemistry, wetting behaviour, temperature profile and sustainability characteristics enables the targeted design of modern cleaning formulations. Products with food contact statuts are available upon request.



# PRODUCT SPOTLIGHT

**Lucramul WT 410**
shorter chain alkoxylate, CIP, emulsifier

**Lucrachem VLF 01**
foam control agent, closed-loop CIP

**Lucramul EPC 06**
reverse alkoxylate, formulation versatility, good wetting

**Lucrachem BEP 01**
butyl alkoxylate, formulation versatility, good emulsifier

# FOOD & BEVERAGE PROCESSING

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL PURPOSE | BOTTLE | CLEANING-PLACE | OPEN PLANT CLEANING | DEGREASER (OVEN & GRILL) |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | | x | x |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | | x | x |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | x | x | x | x |
| **Lucraclean WT 36** | C12-14 Fatty Alcohol (3EO & 6PO) | 11 (A) | x | x | | | | x | | |
| **Lucraclean WT 54** | C12-14 Fatty Alcohol (5EO & 4PO) | 41 (E) | x | x | | | | x | | |
| **Lucramul WT 410** | C10-12 Fatty alcohol (4EO & 4PO) | 35-38 (E) | | x | | | | x | | |
| **Lucramul OMA 09** | C16-18 fatty acid amide, 9 EO | 61 (F) | x | x | | x | | x | x | x |
| **Lucramul OMA 14** | C16-18 fatty acid amide, 14 EO | 45 (E) | x | x | | x | | x | x | x |
| **Lucrachem VLF 01** | Alcohol Alkoxylate | 25 (D) | x | x | | | x | x | | x |
| **Lucramul C13/8** | Tridecyl Alcohol Ethoxylate | 58 (A) | | x | x | x | | | x | |
| **Lucramul ITD 8** | C13 Oxo Alcohol Ethoxylate | 60 (A) | | x | x | x | | | x | |
| **Lucraclean LF 52** | C12-15 Alcohol Alkoxylate | 41 (E) | | x | x | | x | x | | |
| **Lucraclean LF 64** | 2-Propylheptanol Alkoxylate | 38 (A) | | x | | | x | x | | |
| **Lucramul WT 100** | Guerbet Alcohol EO/PO | 66 (G) | | | | x | | | x | x |
| **Lucramul WT 110** | Guerbet Alcohol EO/PO | 52,5 (D) | | x | | x | | | x | x |
| **Lucraclean PHEO L 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | | | x | x |
| **Lucraclean PHEO L 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | | | x | x |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | | x | | | x | x |

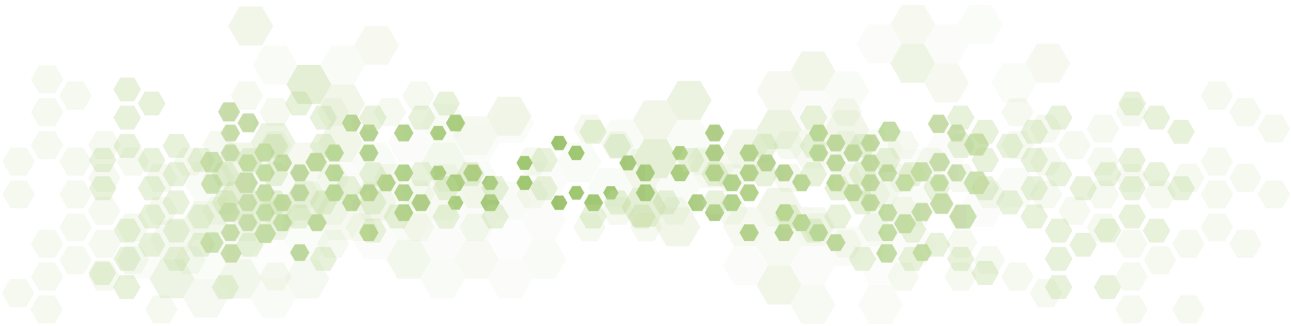
# FOOD & BEVERAGE PROCESSING

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL PURPOSE | BOTTLE | CLEANING-PLACE | OPEN PLANT CLEANING | DEGREASER (OVEN & GRILL) |
| **Lucraclean PHEO 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | x | x | | | x | x |
| **Lucraclean PHEO 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | x | x | | | x | x |
| **Lucraclean PHEO 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | x | x | | | x | x |
| **Lucrachem EPC 06** | reverse EO/PO Block Copolymer, 40% EO | 46 (A) | | x | x* | | x | x | | |
| **Lucrachem EPC 11** | reverse EO/PO Block Copolymer, 20% EO | 29 (A) | | x | x* | | x | x | | |
| **Lucrachem EPC 01** | EO/PO Block Copolymer, 10% EO | 24 (A) | | x | x* | | x | x | | |
| **Lucrachem EPC 13** | EO/PO Block Copolymer, 20% EO | 32 (A) | | x | x* | | x | x | | |
| **Lucrachem EPC 15** | EO/PO Block Copolymer, 10% EO | 36(E) | | x | x* | | x | x | | |
| **Lucrachem BEP 01** | Butyl EO/PO | 66 (E) | | | | | | x | | |
| **Lucrachem BEP 02** | Butyl EO/PO | 56 (H) | | x | | | | x | | |

# INSTITUTIONAL CLEANING & FACILITY MANAGEMENT

LEVACO's portfolio for institutional cleaning covers applications ranging from all-purpose and hard-surface cleaners to carpet, glass and sanitary formulations. Alkyl polyglucosides, linear and Guerbet-based alkoxylates, EO/PO surfactants and phosphate esters support the design of robust systems with defined wetting, soil removal and dispersion performance. HLB value, cloud point, foam characteristics and sustainability profile serve as technical selection criteria for the relevant surface and cleaning task.



# PRODUCT SPOTLIGHT

**Lucramul WT 110**
low foaming wetting agent, broad compability

**Lucraclean LAP 270**
lime scale removal, anti corrosive properties, acidic and alcaline stable

**Lucrachem BEP 01**
low foaming, fast wetting agent, good emulsifier

**Lucraclean PHEO 90**
low foaming, fast wetting agent, good emulsifier

# INSTITUTIONAL CLEANING & FACILITY MANAGEMENT

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL PURPOSE | CARPET | HARD SURFACE | GLAS | SANITARY |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | x | x | x |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | x | x | x |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | | x | | |
| **Lucramul 2407** | C12-14 Fatty Alcohol (7 EO) | 60 (A) | x | x | x | x | x | | x | x |
| **Lucramul 185 DB** | C16-18 and C18 unsaturated (5 EO) | 67 (E) | x | x | | x | | x | x | x |
| **Lucramul C13/10** | Tridecyl Alcohol Ethoxylate (10 EO) | 82 (A) | | x | x | x | x | | x | x |
| **Lucramul C13/8** | Tridecyl Alcohol (9 EO) | 58 (A) | | x | x | x | x | | x | x |
| **Lucramul ITD 8** | C13 Oxo Alcohol (8 EO) | 60 (A) | | x | x | x | x | | x | x |
| **Lucramul WT 100** | Guerbet Alcohol EO/PO | 66 (G) | | | | x | | x | x | x |
| **Lucramul WT 110** | Guerbet Alcohol EO/PO | 52,5 (D) | | x | | x | | x | x | x |
| **Lucraclean PHEO L 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | x | | x | x |
| **Lucraclean PHEO L 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | x | | x | x |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | | x | x | | x | x |
| **Lucraclean PHEO 70** | Guerbet Alcohol Ethoxylate (7 EO) | 68 (E) | | x | x | x | x | | x | x |
| **Lucraclean PHEO 80** | Guerbet Alcohol Ethoxylate (8 EO) | 56 (A) | | x | x | x | x | | x | x |
| **Lucraclean PHEO 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | x | x | x | | x | x |
| **Lucrachem BEP 01** | Butyl Alkoxylate | 66 (E) | | | | | | x | | |
| **Lucrachem BEP 02** | Butyl Alkoxylate | 56 (H) | | x | | | | x | | |

# INDUSTRIAL CLEANING

Industrial cleaning processes place highly diverse demands on wetting, degreasing, dispersion and rinsability, depending on the substrate and type of soil. LEVACO offers a versatile portfolio of alkyl polyglucosides, fatty alcohol alkoxylates, EO/PO surfactants, phosphate esters and other nonionic systems for mechanical cleaning, metal and component cleaning, electronics and PCB cleaning, heavy-duty degreasing and general-purpose cleaners. Structure-based selection according to hydrophilicity, temperature behaviour, foam characteristics and interaction with process media provides the basis for high-performance, technically tailored formulations.



# PRODUCT SPOTLIGHT

**Lucraclean LAP 270**
anti-corrosive properties, acidic and alcaline stable,

**Lucramul OMA 09**
thickening emulsifier,secondary surfactant

**Lucraclean WT 54**
versatile alkoxylate, broad application area,

**Lucramul EPC 06**
reverse alkoxylate, formulation versatility, good wetting

# INDUSTRIAL CLEANING

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | MECHANICAL CLEANING & FIRRIISHING CORROSION INHIBITORS | | DEMULSIFIER | ELECTRONICS & PCB CLEANERS | HARD SURFACE CLEANERS |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | x | | | x | x |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | | | x | x |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | | x | | x | x |
| **Lucraclean WT 54** | C12-14 Fatty Alcohol (5EO & 4PO) | 41 (E) | x | x | | | | | | x |
| **Lucramul OMA 09** | C16-18 fatty acid amide, 9 EO | 82 (D) | x | x | | | | | | x |
| **Lucramul OMA 14** | C16-18 fatty acid amide, 14 EO | 61 (F) | x | x | | | | | | x |
| **Lucrachem VLF 01** | Alcohol Alkoxylate | 25 (D) | x | x | | | | | | x |
| **Lucramul 2407** | C12-14 Fatty Alcohol (7 EO) | 60 (A) | x | x | x | x | | | x | x |
| **Lucramul C13/8** | Tridecyl Alcohol (9 EO) | 58 (A) | | x | x | x | | | x | x |
| **Lucramul ITD 8** | C13 Oxo Alcohol (8 EO) | 60 (A) | | x | x | x | | | x | x |
| **Lucraclean PHEO L 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | | | x | x |
| **Lucraclean PHEO L 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | | | x | x |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | | x | | | x | x |
| **Lucraclean PHEO 70** | Guerbet Alcohol Ethoxylate (7 EO) | 68 (E) | | x | x | x | | | x | x |
| **Lucraclean PHEO 80** | Guerbet Alcohol Ethoxylate (8 EO) | 56 (A) | | x | x | x | | | x | x |
| **Lucraclean PHEO 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | x | x | | | x | x |
| **Lucrachem EPC 06** | reverse EO/PO Block Copolymer, 40% EO | 46 (A) | | x | x* | | | | x | x |
| **Lucrachem EPC 11** | reverse EO/PO Block Copolymer, 20% EO | 29 (A) | | x | x* | | | x | | |
| **Lucrachem EPC 01** | EO/PO Block Copolymer, 10% EO | 24 (A) | | x | x* | | | | x | x |
| **Lucrachem EPC 13** | EO/PO Block Copolymer, 20% EO | 32 (A) | | x | x* | | | | x | x |
| **Lucrachem EPC 15** | EO/PO Block Copolymer, 10% EO | 36 (E) | | x | x* | | | x | x | x |
| **Lucrachem BEP 01** | Butyl Alkoxylate | 66 (E) | | | | | | x | x | x |
| **Lucrachem BEP 02** | Butyl Alkoxylate | 56 (H) | | x | | | | x | x | x |

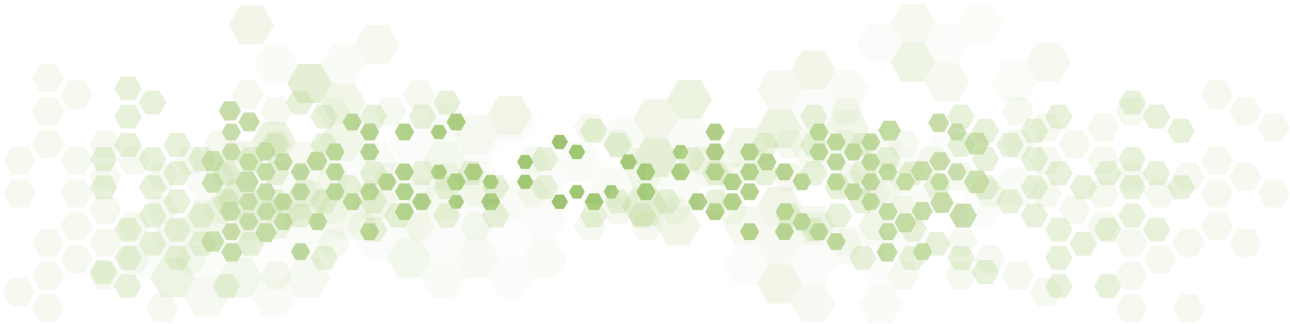
# INDUSTRIAL CLEANING

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL DETERGENTS | HAND CLEANSER | HEAVY DUTY DEGREASING AGENTS | METAL CLEANING | COMPONENT CLEANING | PHOSPHATIZERS |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | | x | | |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | x | | x | | |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | | | x | x | |
| **Lucraclean WT 54** | C12-14 Fatty Alcohol (5EO & 4PO) | 41 (E) | x | x | | | | | x | x | |
| **Lucramul OMA 09** | C16-18 fatty acid amide, 9 EO | 82 (D) | x | x | | x | | | x | x | |
| **Lucramul OMA 14** | C16-18 fatty acid amide, 14 EO | 61 (F) | x | x | | x | | | x | x | |
| **Lucrachem VLF 01** | Alcohol Alkoxylate | 25 (D) | x | x | | x | | | x | | |
| **Lucramul 2407** | C12-14 Fatty Alcohol (7 EO) | 60 (A) | | x | x | x | | | x | | |
| **Lucramul C13/8** | Tridecyl Alcohol (9 EO) | 58 (A) | | x | x | x | | | x | | |
| **Lucramul ITD 8** | C13 Oxo Alcohol (8 EO) | 60 (A) | | x | x | x | | | x | | |
| **Lucraclean PHEO L 70** | Guerbet Alcohol Alkoxylate (7 EO) | 68 (E) | | x | | x | | | x | | |
| **Lucraclean PHEO L 80** | Guerbet Alcohol Alkoxylate (8 EO) | 56 (A) | | x | | x | | | x | | |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | | x | | | x | | |
| **Lucraclean PHEO 70** | Guerbet Alcohol Ethoxylate (7 EO) | 68 (E) | | x | x | x | | | x | | |
| **Lucraclean PHEO 80** | Guerbet Alcohol Ethoxylate (8 EO) | 56 (A) | | x | x | x | | | x | | |
| **Lucraclean PHEO 90** | Guerbet Alcohol Ethoxylate (9 EO) | 69 (A) | | x | x | x | | | x | | |
| **Lucrachem EPC 06** | reverse EO/PO Block Copolymer, 40% EO | 46 (A) | | x | x* | | | x | | x | |
| **Lucrachem EPC 11** | reverse EO/PO Block Copolymer, 20% EO | 29 (A) | | x | x* | | | | | | x |
| **Lucrachem EPC 01** | EO/PO Block Copolymer, 10% EO | 24 (A) | | x | x* | | | x | | x | |
| **Lucrachem EPC 13** | EO/PO Block Copolymer, 20% EO | 32 (A) | | x | x* | | | x | | x | |
| **Lucrachem EPC 15** | EO/PO Block Copolymer, 10% EO | 36 (E) | | x | | | | x | | x | |
| **Lucrachem BEP 01** | Butyl Alkoxylate | 66 (E) | | | | | | | | x | |
| **Lucrachem BEP 02** | Butyl Alkoxylate | 56 (H) | | x | | | | | | x | |

# CAR CARE

For car care applications, LEVACO provides surfactants and functional additives for wheel cleaners, vehicle and car-wash detergents, insect and tar removers, degreasers and other care formulations. Alkyl polyglucosides and nonionic surfactants support reliable wetting and the removal of different types of soil; complementary systems can be tailored to specific requirements such as limescale removal or the care of sensitive surfaces. Product selection is application-driven and considers the cleaning mechanism, material compatibility, foam profile and desired sustainability characteristics.



# PRODUCT SPOTLIGHT

**Lucramul LAP 270**
EO/PO phosphate ester, temporary corrosion inhibtion and anti-static

**Lucramul OMA 14**
thickening emulsifier, car shampoo

**Lucramul CHS**
emulsifying phosphate ester, antistatic and anti-corrosive properties

**Lucramul EH 06**
strong wetting, emulsifying and moderate foaming

# CAR CARE

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | |
|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | RIM CLEANER | CAR & WAGGON WASH | INSECTS & TAR REMOVER | DEGREASING AGENT |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | | x | x | x |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | | x | x | x |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | | x | x | x |
| **Lucramul CHS** | Iso-C13 6EO Phosphate Ester | | | | | x | | | x |
| **Lucramul 2407** | C12-14 Fatty Alcohol (7 EO) | 60 (A) | x | x | x | | | x | |
| **Lucramul 185 DB** | C16-18 and C18 unsaturated (5 EO) | 67 (E) | x | x | | | x | x | x |
| **Lucramul C10/10** | Tridecyl Alcohol Ethoxylate (10 EO) | 82 (A) | | x | x | | x | | |
| **Lucramul WT 100** | Guerbet Alcohol EO/PO | 66 (G) | | | | x | x | x | x |
| **Lucramul EH 06** | 2-Ethyl Hexanol 6 EO | | | x | | x | | x | |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | | x | x | x | x |

# CAR CARE

## PRODUCT OVERVIEW

| CHEMICALS | | | ECO-PROFILE | | | APPLICATION | | | |
|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | CHEMISTRY | CLOUD POINT | BIOBASED | BIODEGRADABLE | DID-LISTING | GENERAL DETERGENTS | LIMESCALE REMOVER | LEATHER & VINYL CARE | POLISHING |
| **Lucramul APG 215** | Caprylyl/Decyl Glucoside | | x | x | x | x | | | |
| **Lucramul APG 225** | Caprylyl/Decyl Glucoside | | x | x | x | x | | | |
| **Lucraclean LAP 270** | Fatty Alcohol EO/PO Phosphate Ester | | | x | | x | x | | |
| **Lucramul CHS** | Iso-C13 6EO Phosphate Ester | | | | | | x | | |
| **Lucramul 2407** | C12-14 Fatty Alcohol (7 EO) | 60 (A) | x | x | x | x | | | |
| **Lucramul 185 DB** | C16-18 and C18 unsaturated (5 EO) | 67 (E) | x | x | | x | | x | |
| **Lucramul C10/10** | Tridecyl Alcohol Ethoxylate (10 EO) | 82 (A) | | x | x | x | | x | |
| **Lucramul WT 100** | Guerbet Alcohol EO/PO | 66 (G) | | | | x | x | x | |
| **Lucramul EH 06** | 2-Ethyl Hexanol 6 EO | | | x | | x | | | |
| **Lucraclean PHEO L 90** | Guerbet Alcohol Alkoxylate (9 EO) | 69 (A) | | x | | x | x | x | x |

# ECO-PROFILE & POTENTIAL ECOLABEL SUITABILITY

The following table provides an overview of the listed product's eco-profiles, including their status on the DID list as well as information on biodegradability and bio-based content. It also indicates whether the products may, in principle, be suitable for use in end products seeking certification under the EU Ecolabel, Nordic Swan Ecolabel or Blue Angel schemes.

This information does not constitute a certification or guarantee of eligibility. LEVACO is not the holder of these ecolabel certifications for the listed products. The certification of the final formulation remains the responsibility of the formulator.

| CHEMICALS | ECO-PROFILE | | | APPLICABLE FOR | | | MARKET SEGMENT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | BIOBASED | BIODEGRADABLE | DID-LISTING | EU ECOLABEL | BLUE ANGEL | NORDIC SWAN | COMMERCIAL LAUNDRY | FOOD SERVICE & KITCHEN HYGIENE | FOOD & BEVERAGE PROECSSING | INSTITUTIONAL CLEANING | INDUSTRIAL CLEANING | CAR CARE |
| **Lucrachem BEP 01** | | | | ** | ** | ** | | x | x | x | x | |
| **Lucrachem BEP 02** | | x | | | | | | x | x | x | x | |
| **Lucrachem EPC 01** | | x | x* | x | | | | | x | | x | |
| **Lucrachem EPC 06** | | x | x* | x | | | | x | x | | x | |
| **Lucrachem EPC 11** | | x | x* | x | x | x | | x | x | | x | |
| **Lucrachem EPC 13** | | x | x* | x | | | | | x | | x | |
| **Lucrachem EPC 15** | | x | x* | x | | | | | x | | x | |
| **Lucrachem S 01** | | x | | ** | ** | ** | x | | | | | |
| **Lucrachem S 02** | | x | | ** | ** | ** | x | | | | | |
| **Lucrachem VLF 01** | x | x | | ** | ** | ** | | x | x | | x | |
| **Lucrachem VLF 04** | | x | | x | x | x | | x | | | | |
| **Lucraclean LAP 270** | | x | | | | | x | x | x | x | x | x |
| **Lucraclean LF 52** | | x | x | x | x | x | | x | x | | | |
| **Lucraclean LF 64** | | x | | x | x | | | x | x | | | |

** To be defined depending on the application

# ECO-PROFILE & POTENTIAL ECOLABEL SUITABILITY

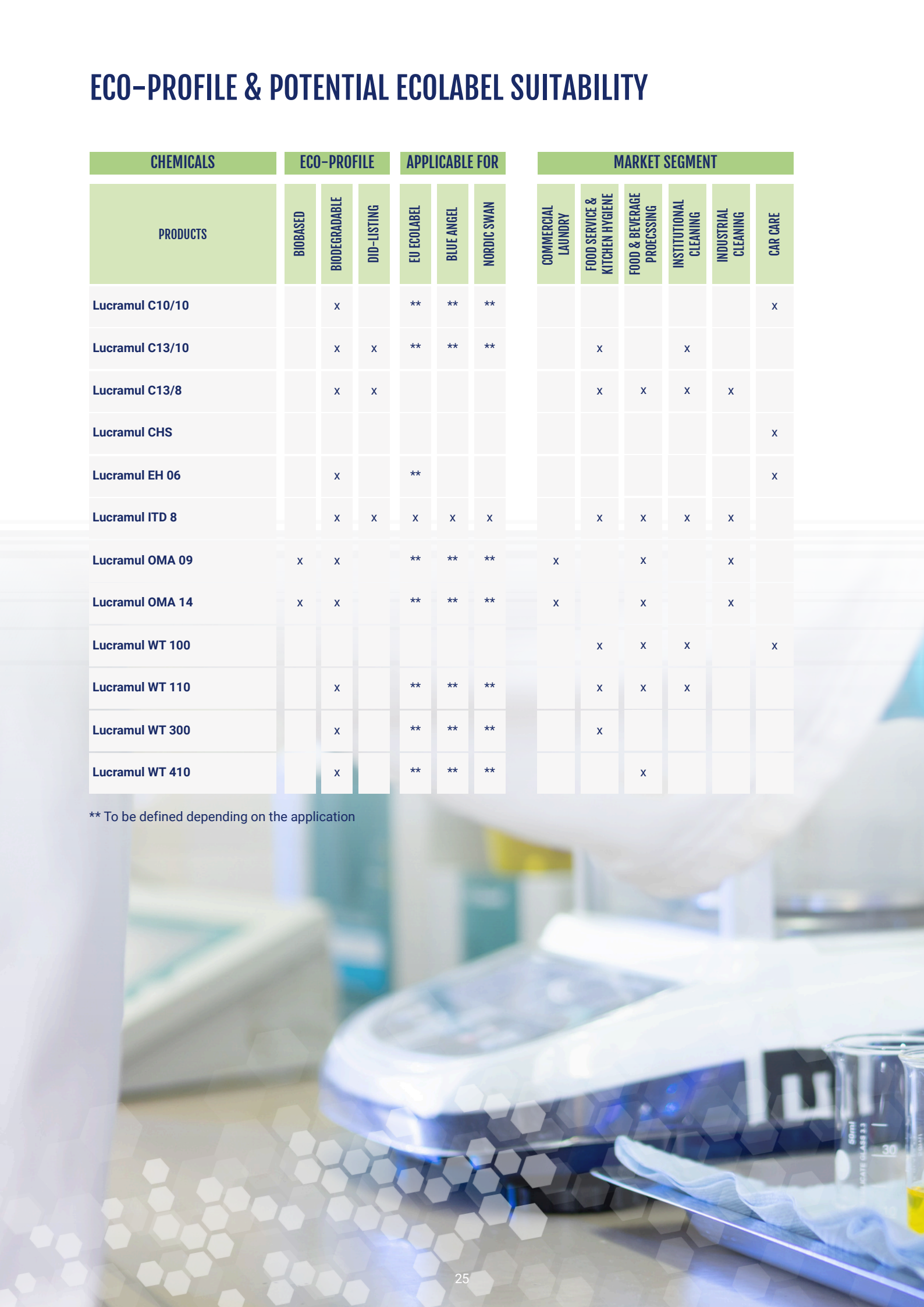
| CHEMICALS | ECO-PROFILE | | | APPLICABLE FOR | | | MARKET SEGMENT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | BIOBASED | BIODEGRADABLE | DID-LISTING | EU ECOLABEL | BLUE ANGEL | NORDIC SWAN | COMMERCIAL LAUNDRY | FOOD SERVICE & KITCHEN HYGIENE | FOOD & BEVERAGE PROECSSING | INSTITUTIONAL CLEANING | INDUSTRIAL CLEANING | CAR CARE |
| Lucraclean PHEO 30 | | x | x | x | x | x | x | | | | | |
| Lucraclean PHEO 40 | | x | x | x | x | x | x | | | | | |
| Lucraclean PHEO 50 | | x | x | x | x | x | x | | | | | |
| Lucraclean PHEO 70 | | x | x | x | x | x | x | x | x | x | x | |
| Lucraclean PHEO 80 | | x | x | x | x | x | x | x | x | x | x | |
| Lucraclean PHEO 90 | | x | x | x | | | x | x | x | x | x | |
| Lucraclean PHEO L 70 | | x | | x | x | x | | | x | x | x | |
| Lucraclean PHEO L 80 | | x | | x | x | x | | | x | x | x | |
| Lucraclean PHEO L 90 | | x | | x | x | x | | | x | x | x | x |
| Lucraclean PHEO LF 50 | | x | x | x | x | x | x | | | | | |
| Lucraclean PHEO LF 70 | | x | x | x | x | x | x | x | | | | |
| Lucraclean PHEO LF 80 | | x | x | x | x | x | x | x | | | | |
| Lucraclean PHEO LF 90 | | x | x | x | x | x | x | x | | | | |
| Lucraclean WT 36 | x | x | | x | x | x | | x | x | | | |
| Lucraclean WT 44 | | x | | ** | ** | ** | | x | | | | |
| Lucraclean WT 54 | x | x | | x | x | x | | x | x | | | |
| Lucramul 185 DB | x | x | | ** | ** | ** | | x | | x | | x |
| Lucramul 2407 | x | x | x | ** | ** | ** | | x | | x | x | x |
| Lucramul APG 215 | x | x | x | x | x | x | | | x | x | x | x |
| Lucramul APG 225 | x | x | x | x | x | x | | x | x | x | x | x |

** To be defined depending on the application

# ECO-PROFILE & POTENTIAL ECOLABEL SUITABILITY

| CHEMICALS | ECO-PROFILE | | | APPLICABLE FOR | | | MARKET SEGMENT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCTS | BIOBASED | BIODEGRADABLE | DID-LISTING | EU ECOLABEL | BLUE ANGEL | NORDIC SWAN | COMMERCIAL LAUNDRY | FOOD SERVICE & KITCHEN HYGIENE | FOOD & BEVERAGE PROECSSING | INSTITUTIONAL CLEANING | INDUSTRIAL CLEANING | CAR CARE |
| **Lucramul C10/10** | | x | | ** | ** | ** | | | | | | x |
| **Lucramul C13/10** | | x | x | ** | ** | ** | | x | | x | | |
| **Lucramul C13/8** | | x | x | | | | | x | x | x | x | |
| **Lucramul CHS** | | | | | | | | | | | | x |
| **Lucramul EH 06** | | x | | ** | | | | | | | | x |
| **Lucramul ITD 8** | | x | x | x | x | x | | x | x | x | x | |
| **Lucramul OMA 09** | x | x | | ** | ** | ** | x | | x | | x | |
| **Lucramul OMA 14** | x | x | | ** | ** | ** | x | | x | | x | |
| **Lucramul WT 100** | | | | | | | | x | x | x | | x |
| **Lucramul WT 110** | | x | | ** | ** | ** | | x | x | x | | |
| **Lucramul WT 300** | | x | | ** | ** | ** | | x | | | | |
| **Lucramul WT 410** | | x | | ** | ** | ** | | | x | | | |

** To be defined depending on the application



LEVACO CHEMICALS

# OUR CHEMISTRY DRIVES PERFORMANCE



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