

ALLNEX'S SUSTAINABLE PRODUCT PORTFOLIO



ECOWISE™ CHOICE FOR THE INDUSTRIAL WOOD MARKET



OUR SPEAKERS



Michela Fusco

*Global Marketing Director
Radcure Business Unit and
Head of the allnex Corporate Sustainability Program*



Tejaswini Vaidya

*Marketing Manager Asia
Liquid Resins and Additives Business Unit*

OUR PANEL OF EXPERTS



Scott Auger
Crosslinkers - GI Marketing Director



Cedric D'Hulst
Radcure - GI Marketing Manager



Pascale Teasdale
Liquid Resins and Additives - Development Manager EMEA



Rob Watson
Powder Coating Resins - GI Marketing/ Business Development Manager

ALLNEX - THE GLOBAL LEADER IN INDUSTRIAL COATING RESINS



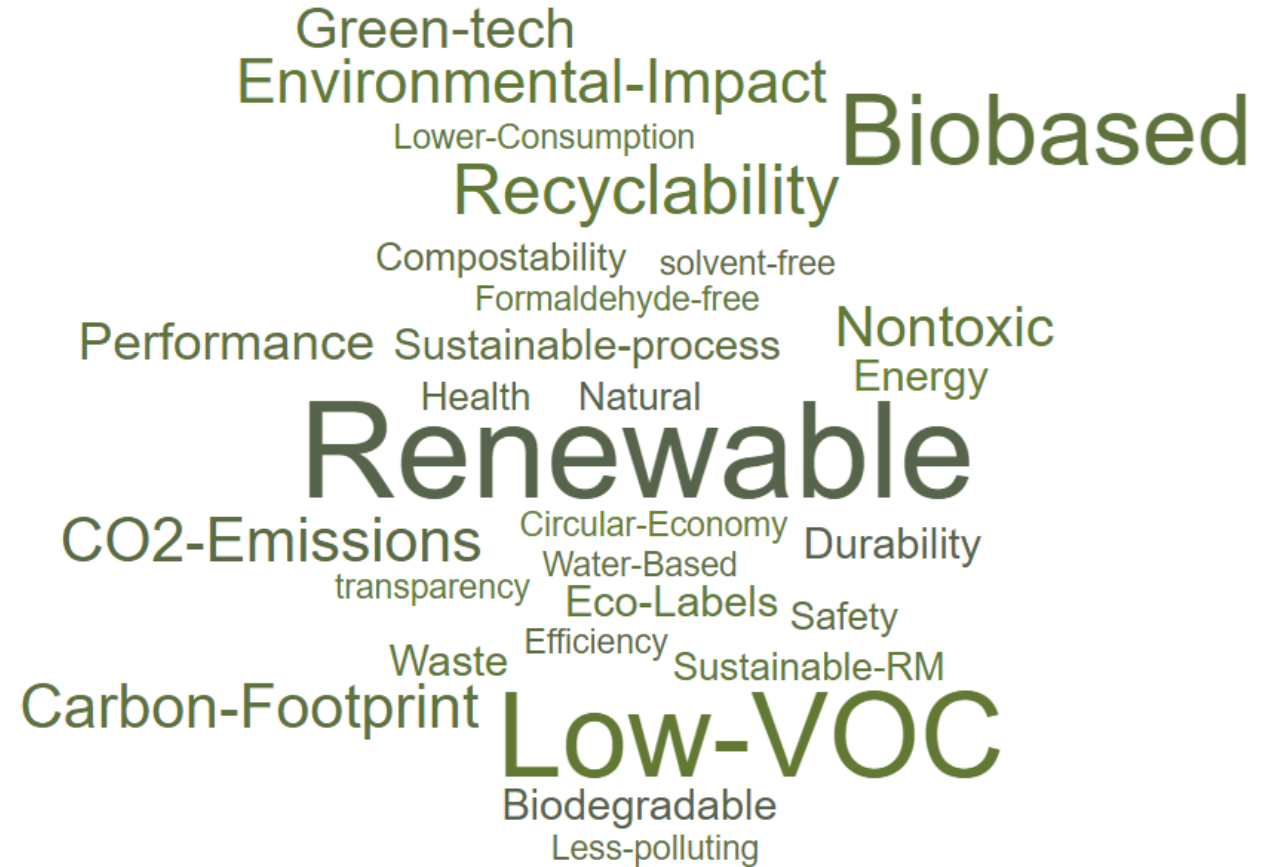
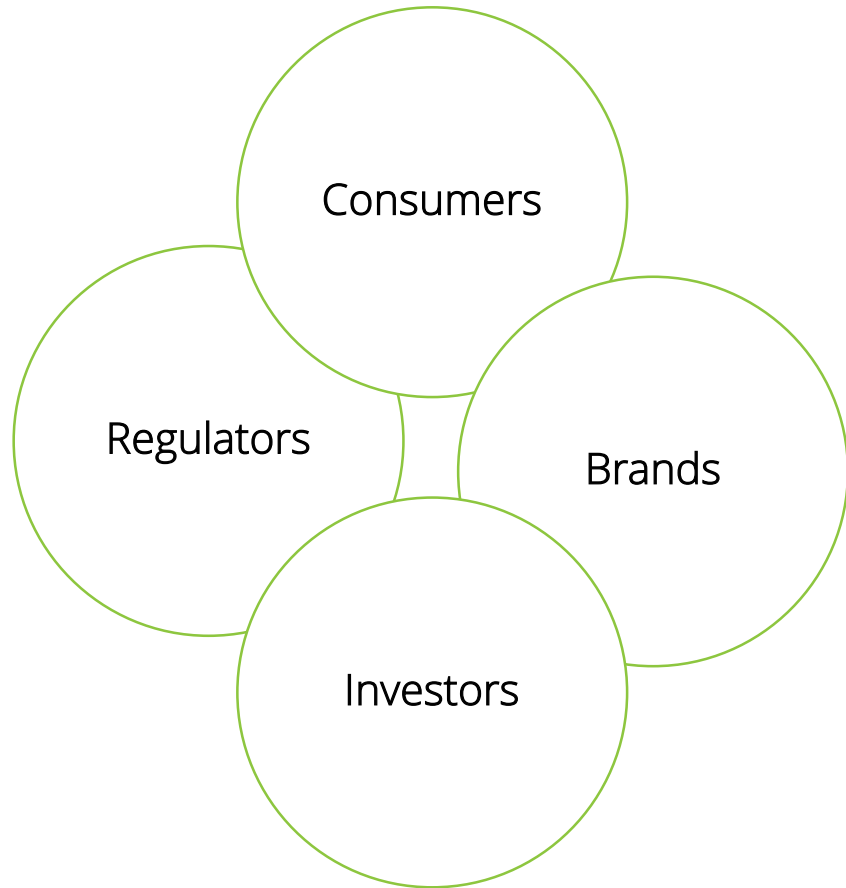
Global company

€ 2.2 billion sales

32 production sites

23 R&D centres

WE OBSERVE AN INCREASED FOCUS ON THE THEME OF SUSTAINABILITY

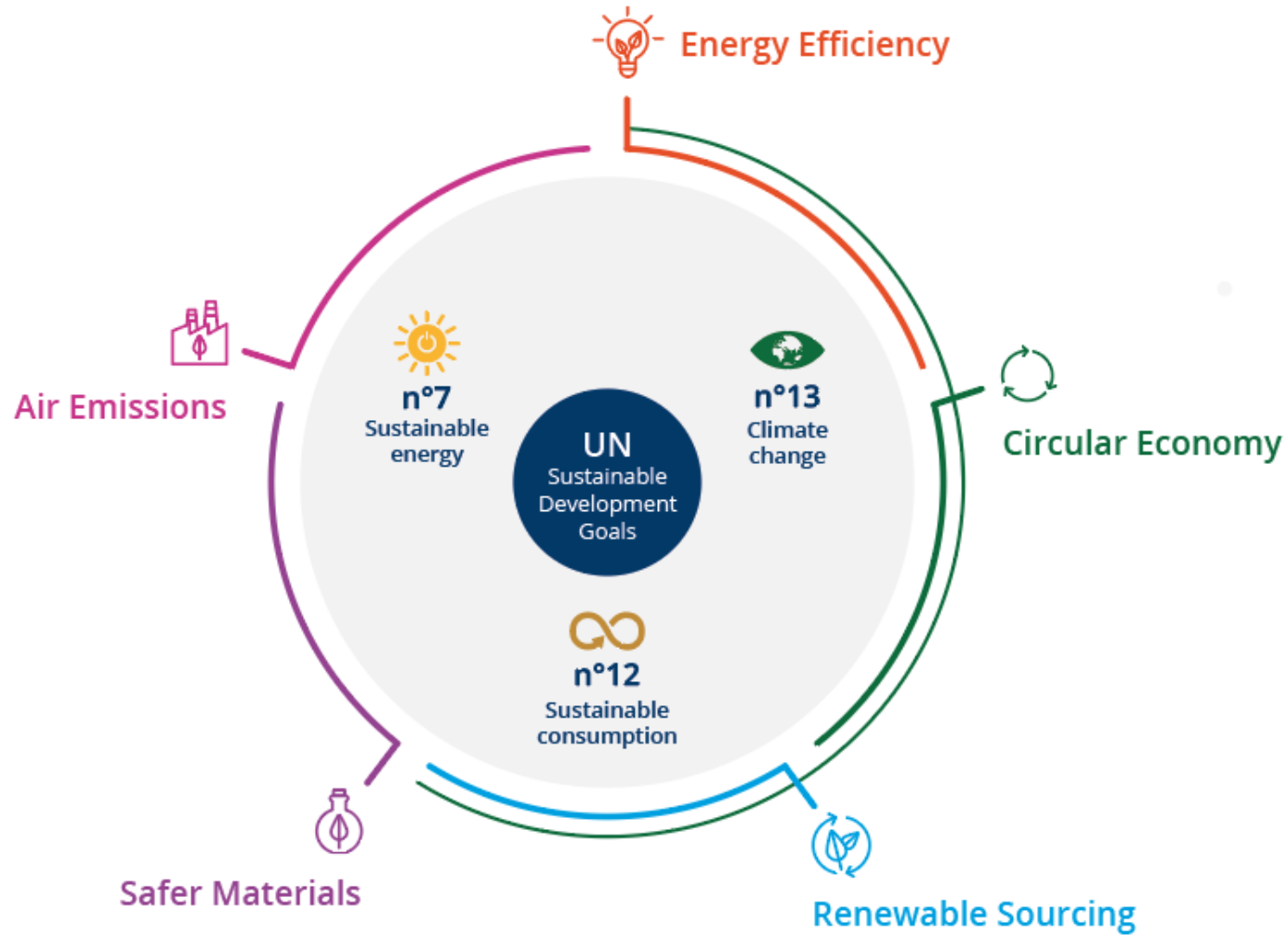


- Be ECOWISE™ reflects our mindset in acting across various areas of sustainability to develop new products and services and to improve our internal operations
- It underlines our dedication and ambition to pursuing a greener and more sustainable future together with our customers



be ECOWISE™

SUSTAINABILITY PILLARS



These pillars are also in line with three UNSDGs where allnex can make the most impact :



SUSTAINABILITY PILLARS - POLL

Which pillar is most relevant for you?

-  Air Emissions
-  Circular Economy
-  Energy Efficiency
-  Renewable Sourcing
-  Safer Materials

OUR SUSTAINABILITY TARGETS



We will **reduce non-renewable energy** purchases by 15% in 5 years*



We will develop a **waste & water consumption tracking** system



We will dedicate **90% of corporate product development resources (CIG)** annually to projects making a positive impact on the environment



We will implement **sustainable product portfolio management** practices



We will produce >40% of production volume under **ISO50001 certification** by 2023



We will map **sustainable sourcing options** for renewable, recycled and lower carbon footprint materials

allnex is committed to meeting these sustainability targets on or before 2023.

An update on the progress is available on <https://www.allnex.com/en/info-hub/news/allnex-announces-substantial-strides-in-2019-2023>

*measured by consumption per ton of product

SUSTAINABLE PORTFOLIO MANAGEMENT



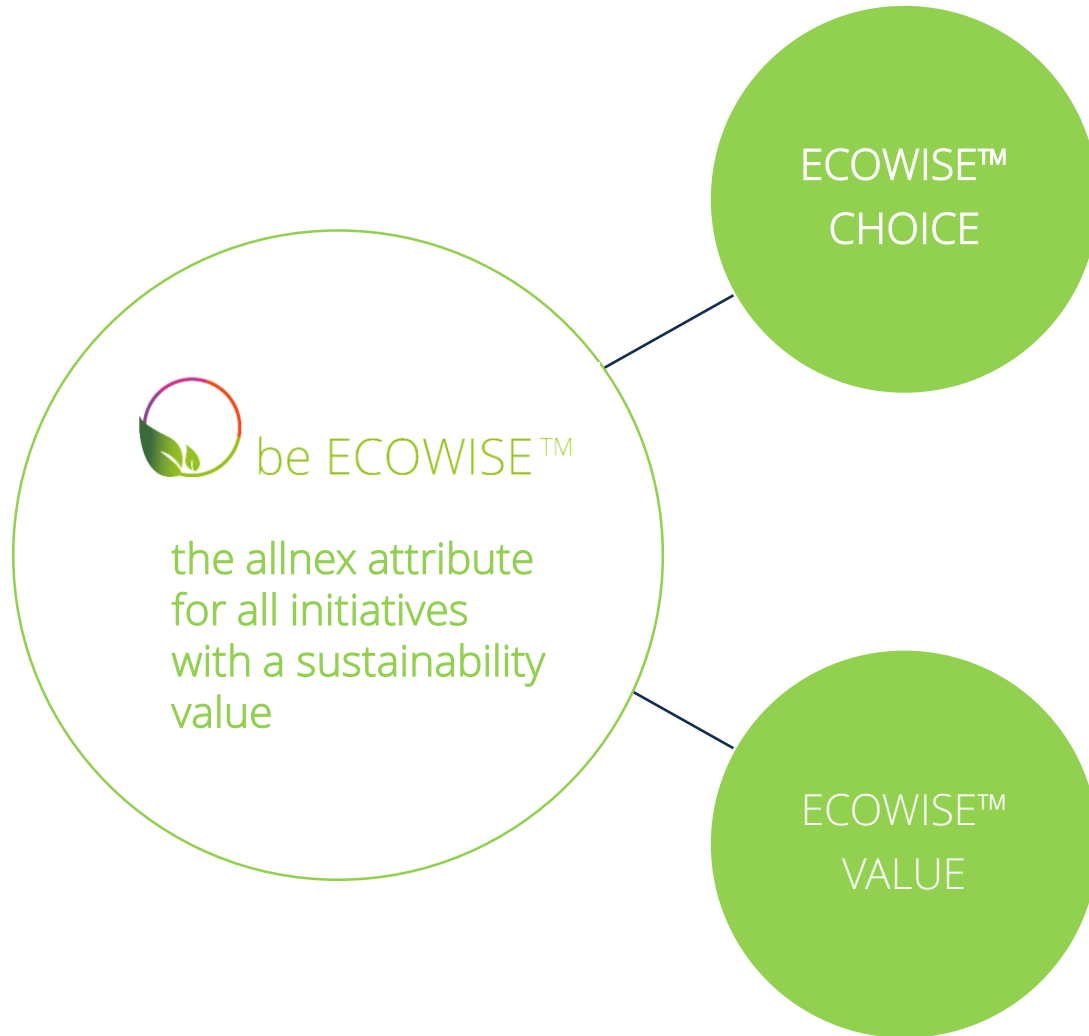
In 2019 we began to develop a more structured, robust sustainable portfolio management (SPM) process.

Through the SPM we aim to categorize our products by analyzing their sustainable benefits and challenges, using a fact-based methodology.

“Sustainable Portfolio Management is the keystone of our Sustainability Program. It enables us to steer our product offering and innovation pipeline in line with the sustainability needs of the market and to support our customers, end-markets, and stakeholders”

- Benoit De Becker, VP Strategy & Innovation

ECOWISE™ CHOICE



- Assessed against the most stringent global industry standards and ecolabels
- In context of the end application

ECOWISE™ CHOICE meets criteria and delivers additional sustainability benefits

01

Define

Set up internal criteria* based on sustainability needs and trends in the value chain.

02

Analyze

Compare our key products against the set criteria and market reference

03

Identify

Identify the sustainability benefits of the products along our sustainability pillars.

* In setting the criteria we have closely followed the guidelines for chemical industry proposed by the World Business Council for Sustainable Development (WBCSD).

MEETING THE SUSTAINABILITY NEEDS OF THE INDUSTRIAL WOOD MARKET



Our ECOWISE™ CHOICE for industrial wood offers a complete range of green technologies for coatings for key applications in the market:

Application

- ✓ Cabinets
- ✓ Furniture
- ✓ Flooring
- ✓ Joinery
- ✓ Specialty applications

Sustainable benefits

- ✓ Air quality
- ✓ Durability
- ✓ Material efficiency
- ✓ Energy efficiency
- ✓ Circular, lower carbon footprint

In assessing our portfolio we have factored in the key requirements of industry partners (e.g. IKEA of Sweden Material specification, Nordic Swan and Greenguard)

SNAPSHOT OF THE CRITERIA



- CMR categories
- Respiratory sensitizers
- Substances of very high concern
- Persistent, bio accumulative or toxic
- BPA free¹
- Free from ORGANOTIN compounds



- Formulation with VOC <100g/l
- Formaldehyde free, including formaldehyde releasers
- APEO free²
- Ozone depleting substances

ECOWISE™ CHOICE

ECOWISE™ CHOICE product list by technology



Amino Crosslinkers

- ✓ [CYMEL® NF 3030](#)

Waterborne acrylics

- ✓ [SETAQUA® 6405](#)
- ✓ [SETAQUA 6756](#)
- ✓ [SETAQUA 6716](#)
- ✓ [SETAQUA 6717](#)
- ✓ [SETAQUA 6718](#)
- ✓ [SETAQUA 6719](#)
- ✓ [SETAQUA 6726](#)
- ✓ [SETAQUA 6799](#)

Waterborne UV

- ✓ [UCECOAT® 7999](#)

100% UV

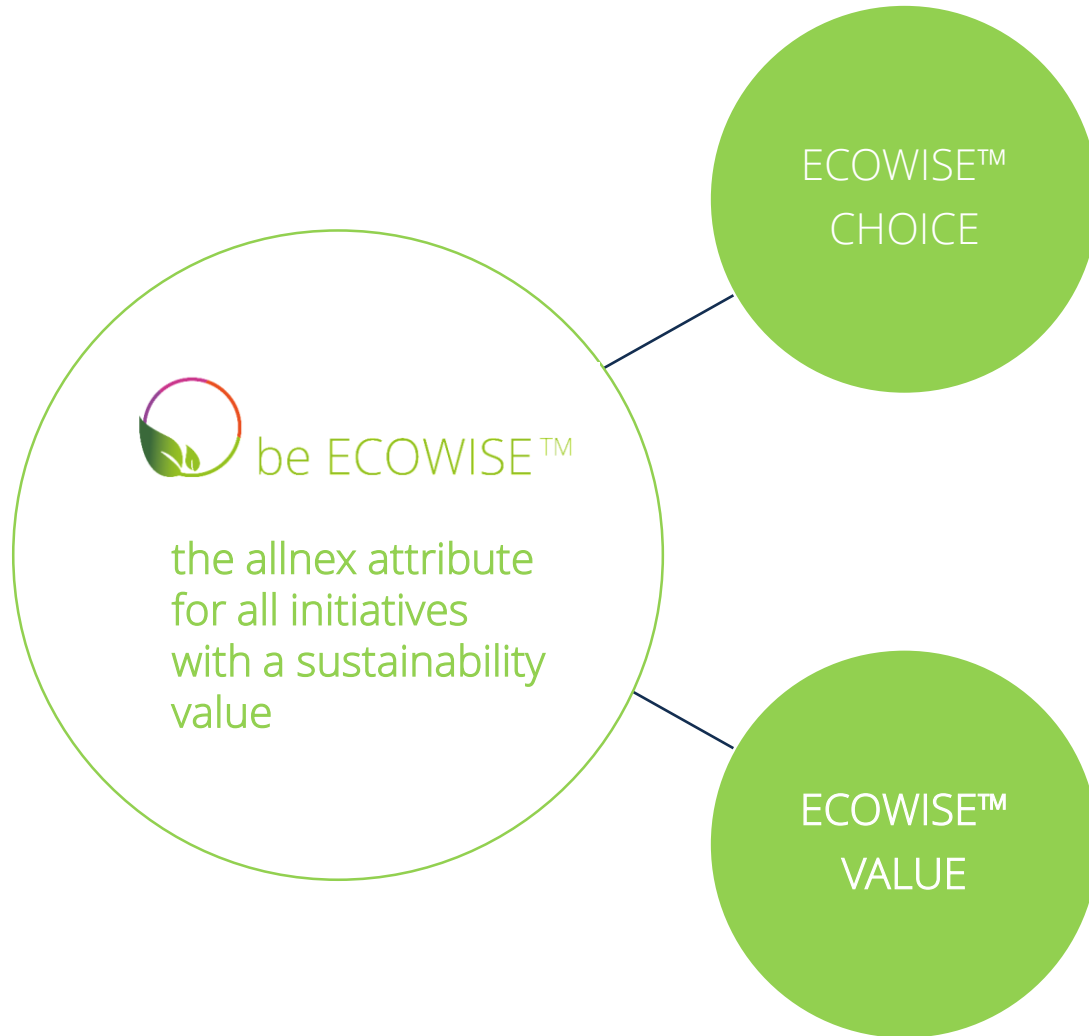
- ✓ [EBECRYL® 4690](#)
- ✓ [EBECRYL 5848](#)
- ✓ [EBECRYL LED03](#)

Powder

- ✓ [UVECOAT® 3005](#)
- ✓ [UVECOAT 9010](#)

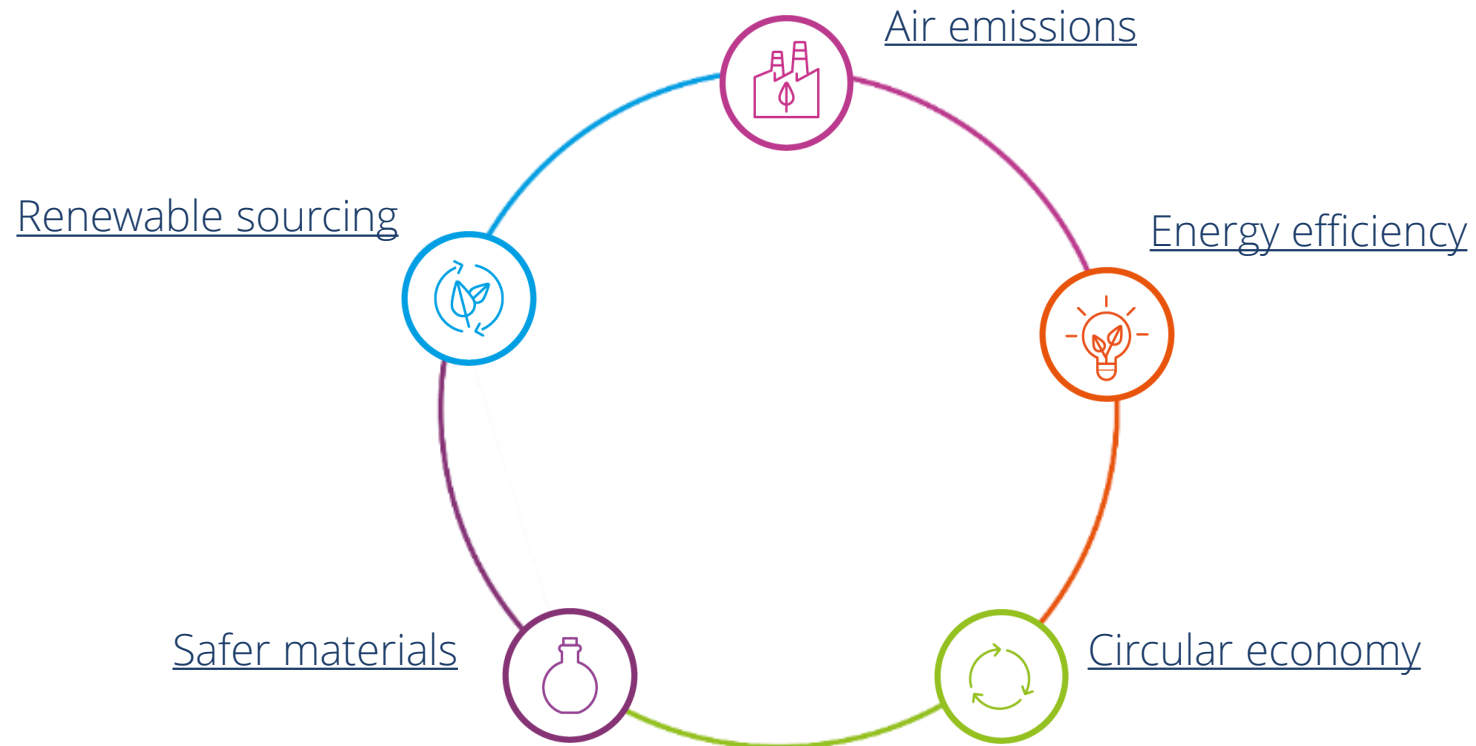
These are the first wave of products under ECOWISE CHOICE. The list will be updated as we ascertain the sustainability value of more products

<https://allnex.com/en/technologies/ecowise-choice>



- Bring a significant sustainability proposition along one or more allnex sustainability pillars
- Help our customer and value chain partners meet specific sustainability objectives

POLL ANSWERS ON IMPORTANT PILLARS



ANY QUESTIONS PLEASE



TO LEARN MORE

Contact your allnex representative or visit our website

<https://allnex.com/en/technologies/ecowise-choice>

<https://allnex.com/en/contact-us>

THANK YOU

“As our world is changing before our eyes in ways no one could have predicted, contributing to the preservation of our planet’s natural resources in any way possible is the responsibility of us all. ECOWISE™ is our contribution”

– Rob Watson, GI Marketing/Business Development Manager, Powder Coating Resins







1. What is ECOWISE CHOICE?

- a) ECOWISE CHOICE is the allnex brand for our sustainable product portfolio
- b) We have assessed our products against ecolabel's criteria to ensure products in the ECOWISE CHOICE range can help our customer meet these requirements. The criteria used is shown in the questionnaire. We have tools available to communicate transparently to our customers.

2. How is allnex selecting the ECOWISE CHOICE portfolio?

- a) In setting up the methodology, process and guidelines we have closely followed the recommendations provided by World Business Council for Sustainable Development (WBCSD, 2019). Additionally KPMG Sustainability analyzed our Sustainability Portfolio Management methodology, which helped us to identify key areas in our process, governance structure and methodology to focus on for a continuous improvement approach. More information is available at allnex.com
- b) Within the methodology for ECOWISE CHOICE we have not included the full carbon footprint analyses of our products. Additionally, our assessments for renewable sourcing and energy efficiency excludes the energy consumed at our facilities. We have identified the GHG emission aspect with our energy efficiency targets reduction set at manufacturing level and working with suppliers to improve traceability of the GHG emissions. We are also working on our capabilities to assess GHG emissions on a product level and to support our customers with Life Cycle analyses for ECOWISE CHOICE products

3. How can allnex support me on LCA data?

- a) Cradle-to-cradle Life-Cycle Assessment (LCA) is a thorough scientific approach to examine a product in its different applications. For the purpose of the ECOWISE CHOICE selection we limit the assessment to a qualitative analysis to identify the environmental benefits of our product in comparison to the competition. These benefits range from improved technical performance, increase energy efficiency or lower emissions. The SPM relies on qualitative thinking to ensure other material topics (e.g. durability) are covered, which our LCA does not address.
- b) We are open to having further discussions with you, should you need data for your own LCA. Please reach out to at psra-customer-requests@allnex.com if you wish to discuss your needs with an allnex representative.



4. How can allnex support me with regard to data on renewable and recycling content?
- We can provide an allnex declaration of renewable or recycled content based on our suppliers' statements and our internal auditing. For renewable materials containing a C14 or biomass balance declaration will be issued, depending on customer needs, the raw material supply, and process flows. The ability to issue a C14 declaration for a product may require investments in the supply and process chains which will be considered after validation with customers.
 - We are adopting a responsible sourcing vision to develop our new renewable products, including considerations on issues as competition with food, land use and impact on local communities in materials selection. We target sourcing from 2nd generation feedstock (by-products/ residues from forestry, agriculture, industry or waste streams) whenever possible, and we evaluate sources that use regenerative agricultural and forestry practices. For more information, please refer to our renewable materials brochure.
https://www.allnex.com/getmedia/f7f51d17-bb2c-47fd-9527-6da07e2b2deb/0141_AL-Renewables_web.pdf
5. How often is the ECOWISE CHOICE portfolio reviewed?
- The ECOWISE CHOICE portfolio is a living selection following evolution of our product offerings, changing benchmarks and market needs. You will see more products being added as we continue the assessment of our current portfolio and new products are introduced to market. Furthermore allnex is continuously monitoring regulatory updates and developing trends. These identified changes will be implemented during annual reviews. However, this process may be expedited if we see a strong indication of changing trends which would significantly impact the relevancy of ECOWISE CHOICE. The products and questionnaire listed in this version of the document are updated as of 31st March 2020. Kindly refer to the allnex website for the latest version. (<https://www.allnex.com/en/technologies/ecowise-choice>)
6. Are allnex's results externally assured?
- We are in the process of building reliable databases and take steps for assurance

CRYLCOAT® E 04712



- ✓ Highly reactive carboxyl functional modified polyester resin for matte hybrid powder coatings
- ✓ Designed to achieve a gloss range at 60° of 10-25 units on MDF and metal
- ✓ Outstanding smoothness and chemical resistance at temperature as low as 130°C



RAYLOK® 1622



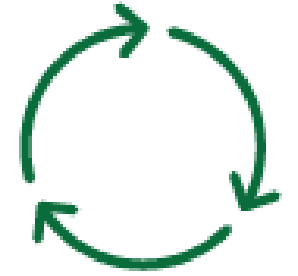
- ✓ Raylok 1622 is a low viscosity natural oil modified oligomer acrylate with 21% of bio-based content
- ✓ Strong reactivity, good adhesion on wood, good overall balance of properties and an improved scratch and chemical resistance
- ✓ Typically used in wood topcoats and gives a transparent oily like natural and warm aspect when used in clearcoats



ACURE™



- ✓ A novel, non-iso 2k system based on Michael Addition that provides extremely fast dry times with very long pot lives.
- ✓ Tuneable potlife and open time with fast drying times enables applicators to paint very large objects without having to renew the paint thus minimizing waste
- ✓ Additional sustainability benefits of low VOC, low curing temperature and isocyanate free



CYMEL® NF 3041



- ✓ Used in 2 component, ambient cure, solvent-borne conversion varnishes for industrial wood
- ✓ Does not contain formaldehyde so no formaldehyde emissions during curing process
- ✓ Fast cure response in ambient and heat cure applications along with extended catalyzed coating stability or pot life



MACRYNAL® SM 6826w/43WA



- ✓ High quality glossy and self-matted topcoats
- ✓ Very low to no VOC formulations possible
- ✓ Higher film thickness in one application



FORMALDEHYDE FREE CROSSLINKER

ECOWISE™ CHOICE

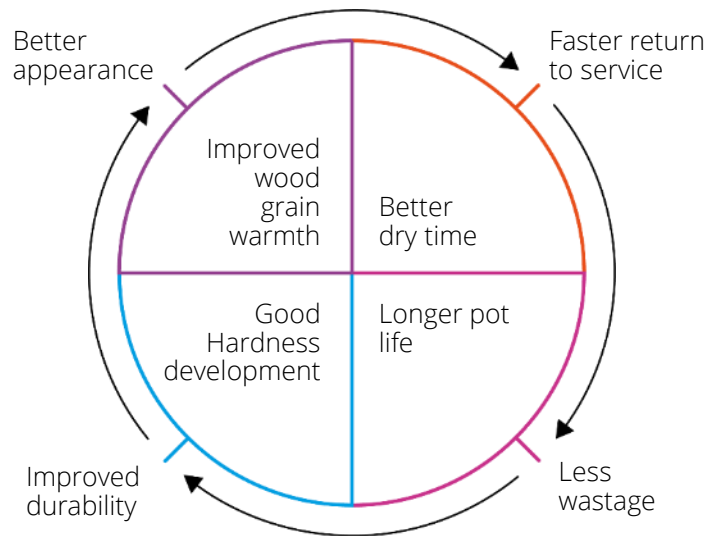
CYMEL® NF 3030

Formaldehyde-free crosslinking agent supplied in water. It was designed primarily for use in 2 component, ambient or forced cure, water-borne conversion varnishes for industrial wood when formulated with VIACRYL® SC 6834w/42WA. Resulting formulas exhibit superior catalyzed pot life relative to isocyanate-based conversion varnishes. The resulting coatings have excellent appearance, early hardness, resistance properties, and hot/cold cycle flexibility.

Applications

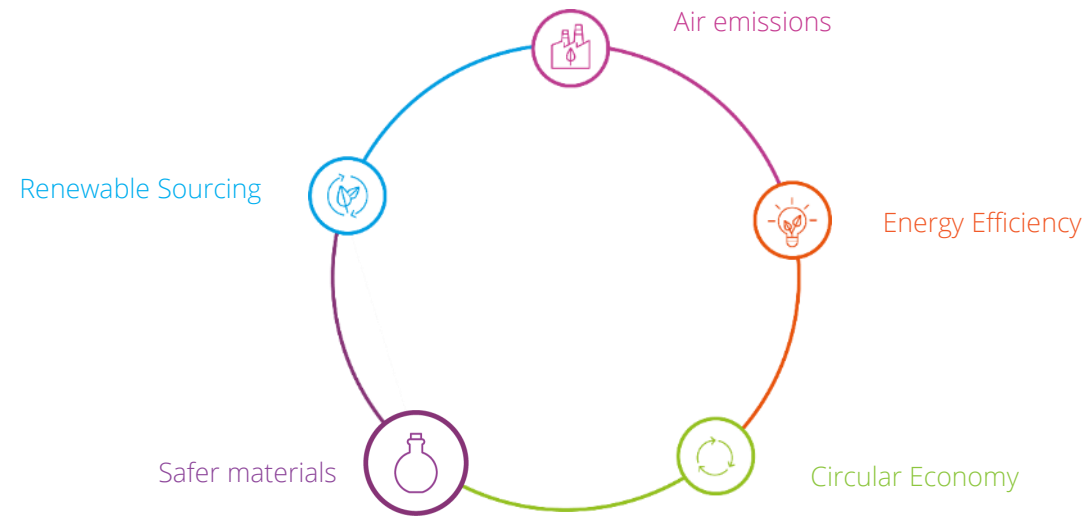
Industrial Wood Coatings, Encapsulation

Key Performance Proposition



Key Sustainability Proposition

No VOC's, formaldehyde free



UNSDG 12: Responsible consumption and production



BIO-BASED ENERGY-CURABLE POLYURETHANE DISPERSION

ECOWISE™ CHOICE

UCECOAT® 7999

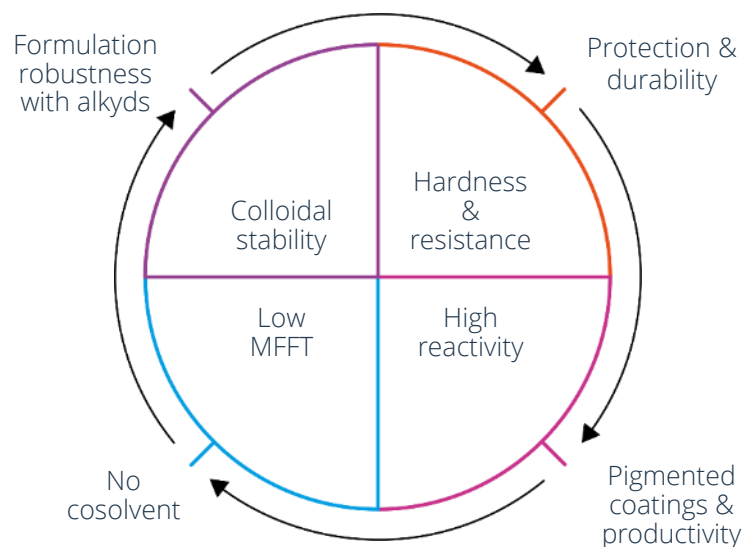
Tin-free and APEO-free energy-curable polyurethane dispersion with ~22% bio-carbon offering. Excellent hardness and durability for clear and white coats. The product has a low VOC with an easy film formation requiring no cosolvent. It presents a high reactivity for an increased productivity.

Applications

Wood furniture and parquet flooring.

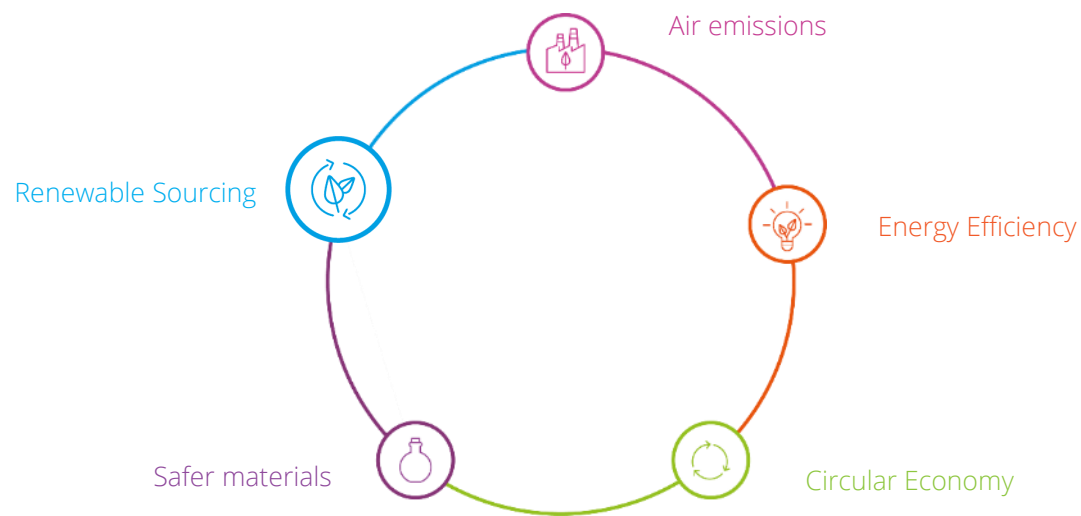


Key Performance Proposition



Key Sustainability Proposition

Significant material carbon footprint reduction



UNSDG no 12 : Responsible consumption and production

UNSDG no 13 : Climate action



BIO-BASED ENERGY-CURABLE URETHANE ACRYLATE

ECOWISE™ CHOICE

EBECRYL® 4690

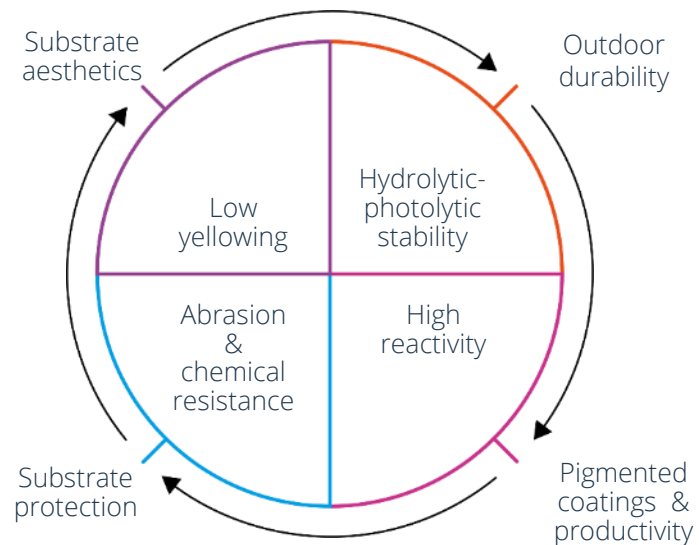
Energy-curable urethane acrylate with 30.5% bio-carbon offering and an excellent outdoor durability for clear and pigmented coats. This solvent-free product presents a high reactivity for efficient productivity and brings high hardness after cure with excellent substrate protection.

Applications

Coating for exterior cladding, joinery and concrete.

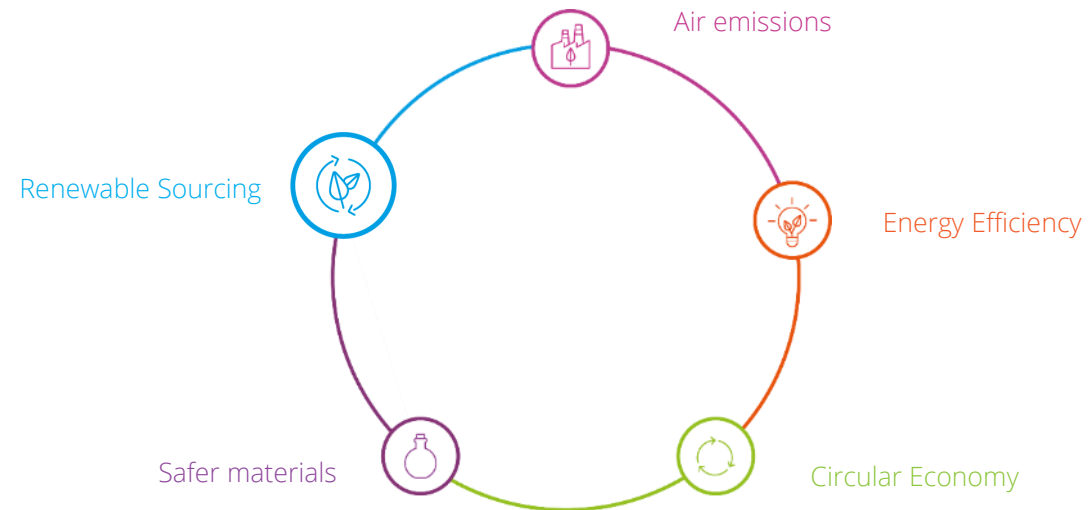


Key Performance Proposition



Key Sustainability Proposition

Significant material carbon footprint reduction



UNSDG no 12 : Responsible consumption and production

UNSDG no 13 : Climate action



*based on the impact of the renewable content

BIO-BASED ENERGY-CURABLE SOYBEAN OIL EPOXY ACRYLATE

ECOWISE™ CHOICE

EBECRYL® 5848

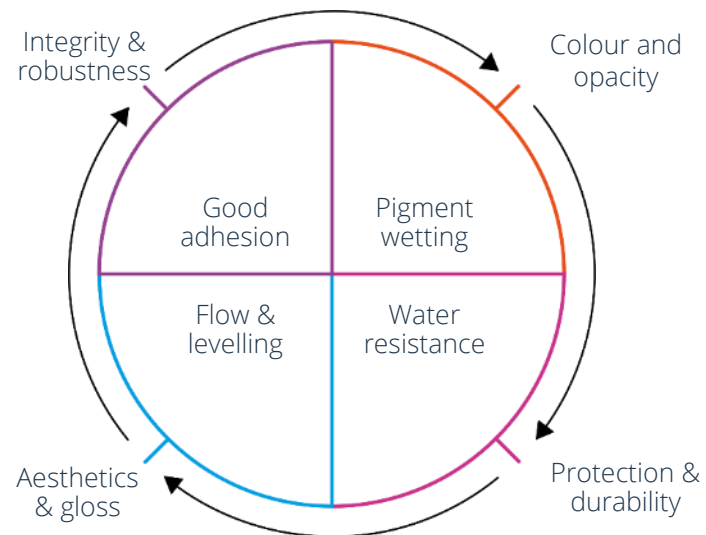
Energy-curable soybean oil epoxy acrylate with ~84% bio-carbon offering excellent pigment wetting. This solvent-free product presents good levelling, substrate wetting and adhesion with a nice appearance. The desired hardness and resistance are achieved with acrylated blending partners.

Applications

Pigmented coating on wood, plastic, metal and paper.

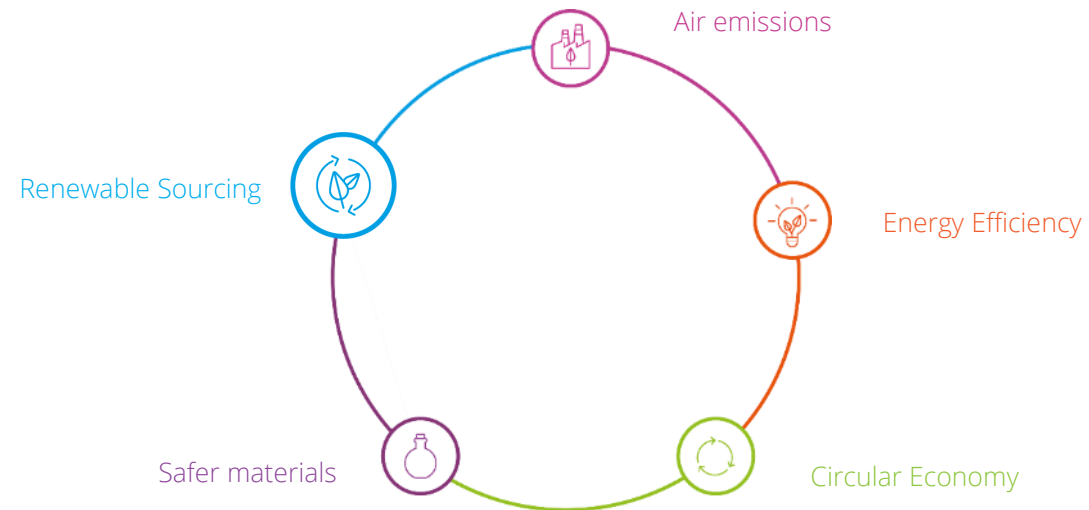


Key Performance Proposition



Key Sustainability Proposition

Significant material carbon footprint reduction



UNSDG no 12 : Responsible consumption and production

UNSDG no 13 : Climate action



AMINE MODIFIED ENERGY-CURABLE POLYETHER ACRYLATE

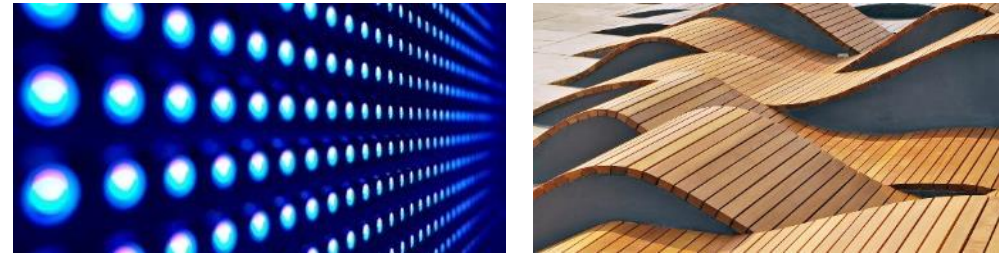
ECOWISE™ CHOICE

EBECRYL® LED 03

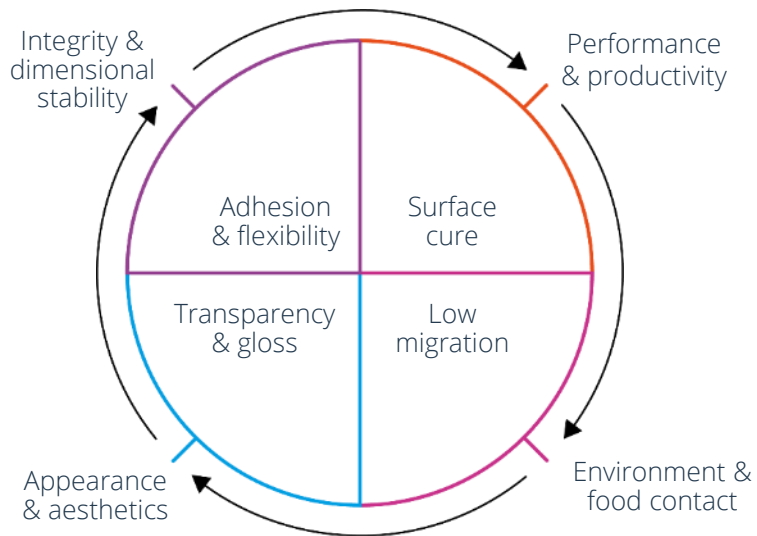
Amine modified energy curable polyether acrylate used as booster for low energy cure (LED). It provides improved surface cure associated with adhesion promotion, enhanced flexibility and gloss. The product is appreciated for its low odour and low migration potential.

Applications

Coatings on wood and plastic; inks & overprint varnishes

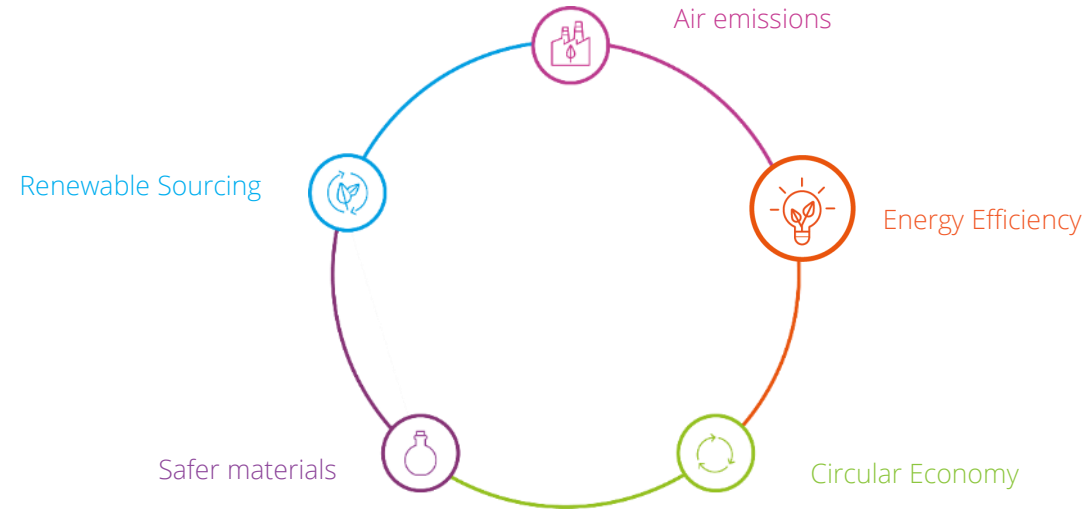


Key Performance Proposition



Key Sustainability Proposition

Low energy cure with LED lamps



UNSDG no 7 : Affordable and clean energy



UNSATURATED POLYESTER FOR UV POWDER COATINGS

ECOWISE™ CHOICE

UVECOAT® 3005

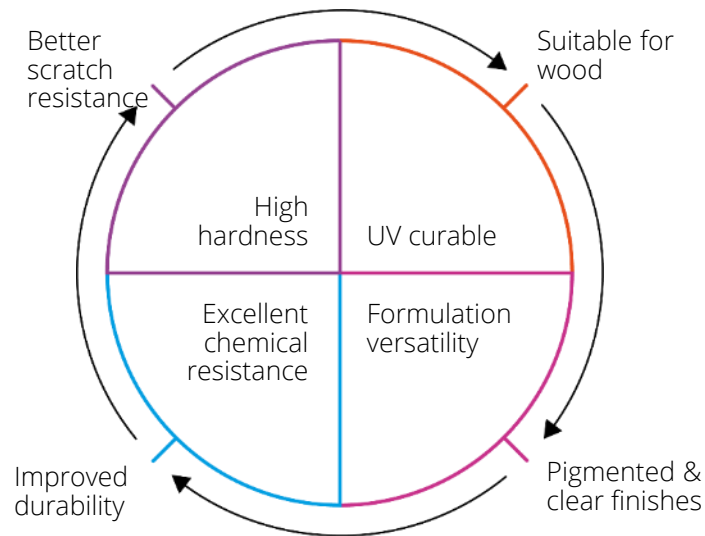
UVECOAT® 3005 is an amorphous unsaturated polyester resin for use in UV curable powder coatings. The resin has been developed for applications on wood substrates such as textured coatings on MDF and clear varnishes for natural hardwood. Coatings based on UVECOAT® 3005 exhibit excellent scratch resistance.

Applications

Coating MDF & wood used in cabinetry & furniture

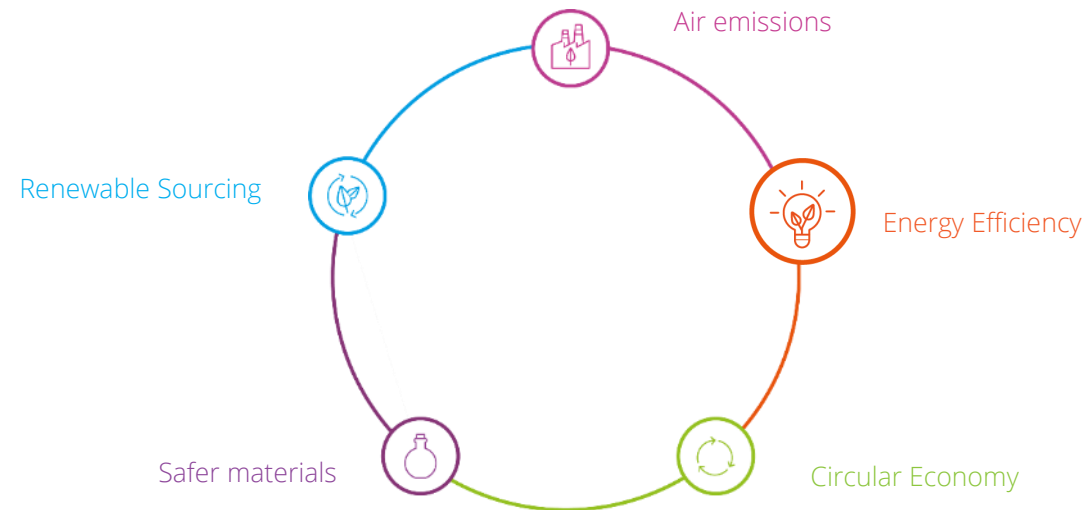


Key Performance Proposition



Key Sustainability Proposition

UV curable at low temperature



UNSDG no 7 : Affordable & Clean Energy



UNSATURATED POLYESTER FOR UV POWDER COATINGS

ECOWISE™ CHOICE

UVECOAT® 9010

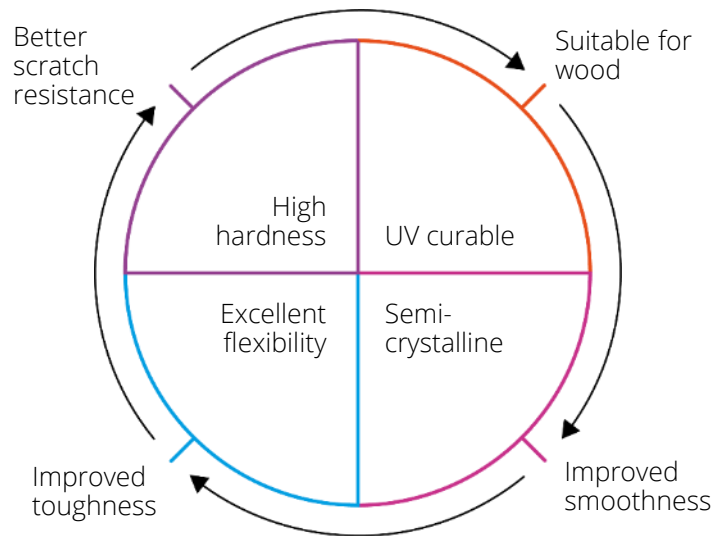
UVECOAT® 9010 is a semi-crystalline un-saturated polyester resin for use in UV curable powder coatings. Used with amorphous resins from the UVECOAT® 2000 or 3000 range, UVECOAT® 9010 improves the smoothness and flexibility of the coating.

Applications

Coating MDF & wood used in cabinetry & furniture

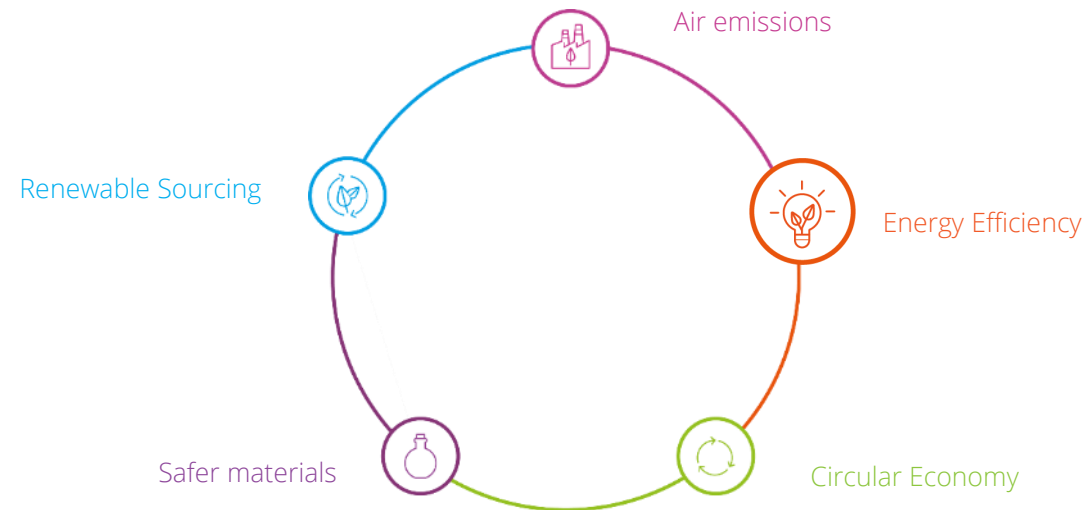


Key Performance Proposition



Key Sustainability Proposition

UV curable at low temperature



UNSDG no 7 : Affordable & Clean Energy



SETAQUA® 6405

ECOWISE™ CHOICE

SETAQUA® 6405

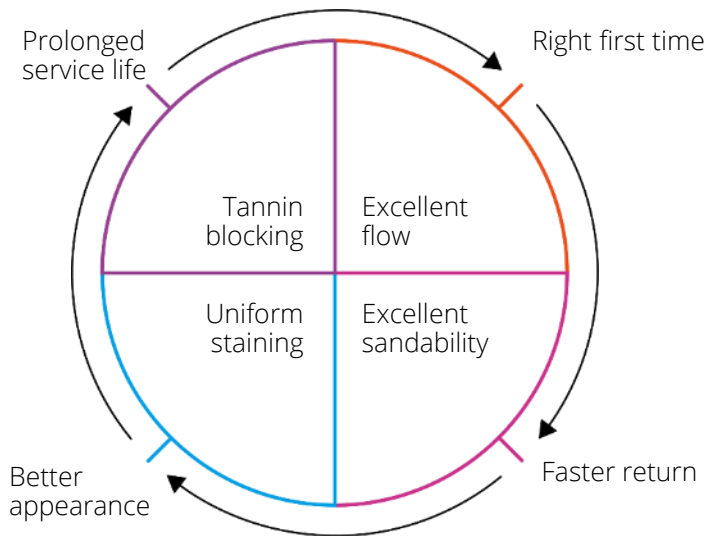
A surfactant free acrylic binder developed for impregnating stains and tannin blocking primers with very good sandability. Impregnating stains formulated with SETAQUA® 6405 exhibit excellent flow and uniform staining properties when used in dip and flow coating processes.

Applications

Impregnating stains for hard woods and tannin blocking primers.

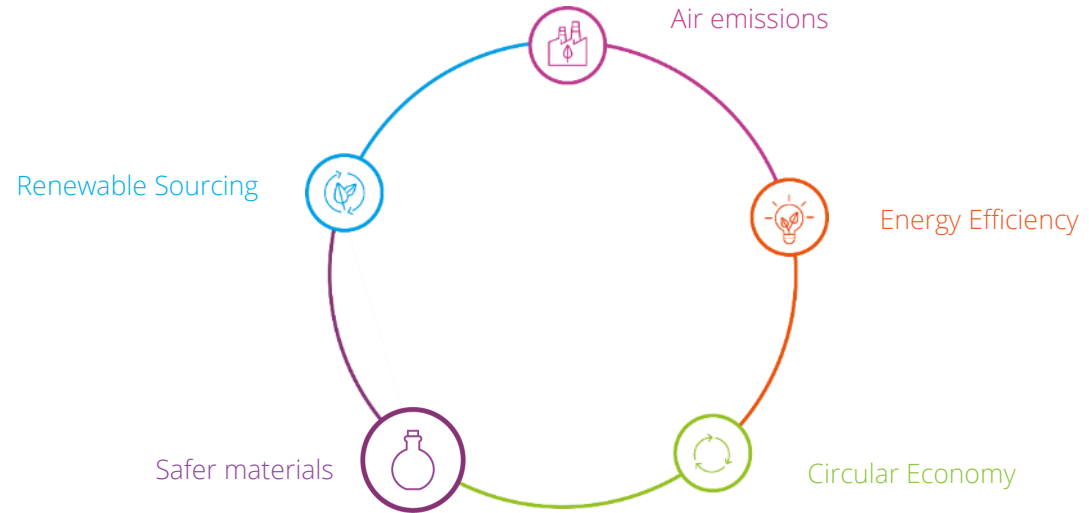


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6716

ECOWISE™ CHOICE

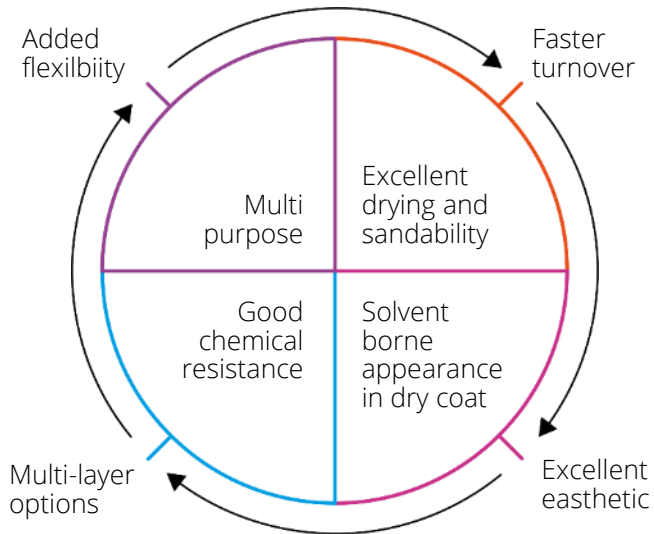
SETAQUA® 6716 A self-cross-linking surfactant-free acrylic dispersion that offers excellent hardness, fast drying and good sandability and exceptional chemical resistance. Due to its small particle size, varnishes based on SETAQUA®6716 have good in-can clarity and a solvent-borne like appearance of the dry coating.

Applications

Highly transparent clear coats over light coloured substrates.

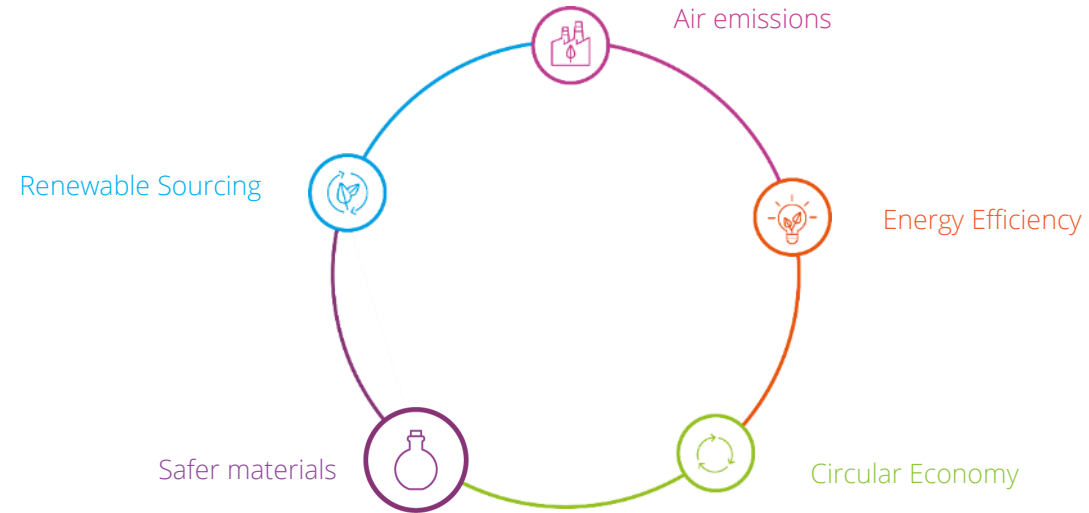


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6717

ECOWISE™ CHOICE

SETAQUA® 6717

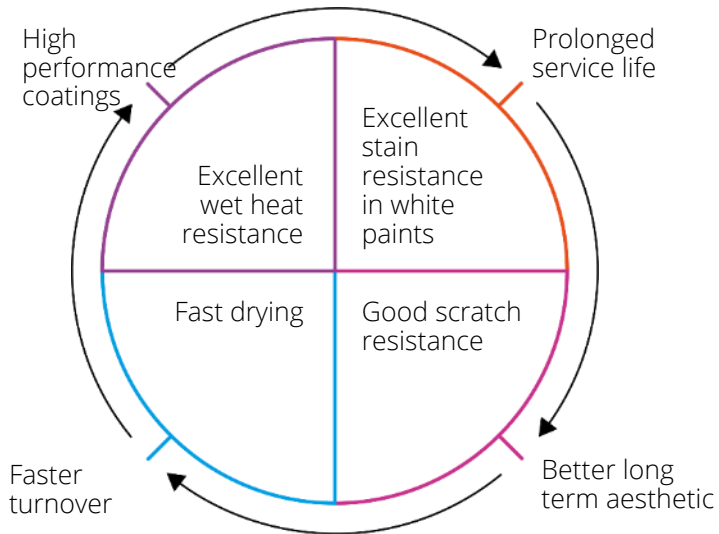
A waterborne, self-cross linking, fine particle size acrylic dispersion developed to feature exceptional water and chemical resistance properties as well as dry and wet heat resistance. SETAQUA® 6717 has excellent response to associative thickeners and can be easily matted.

Applications

Clear and pigmented furniture topcoats.

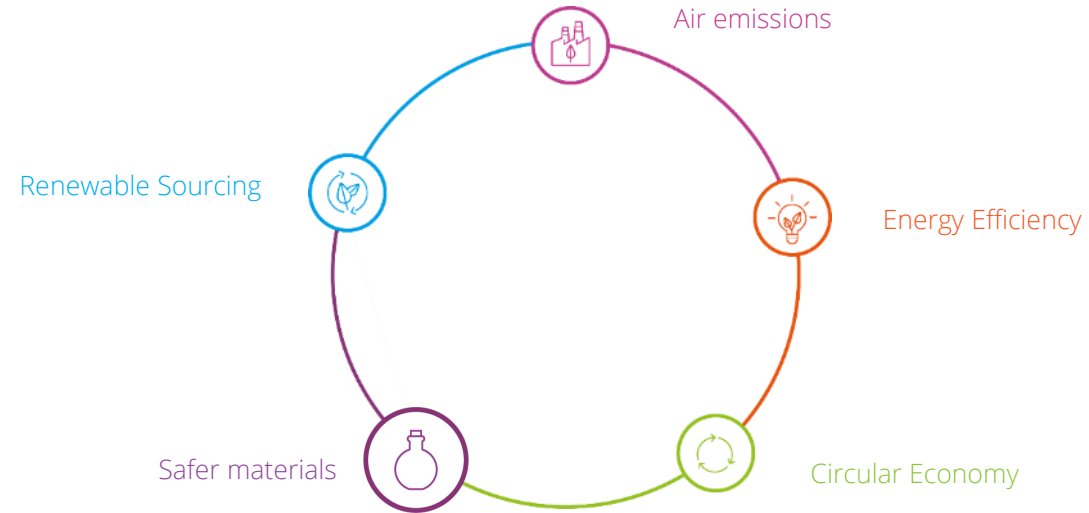


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6718

ECOWISE™ CHOICE

SETAQUA® 6718

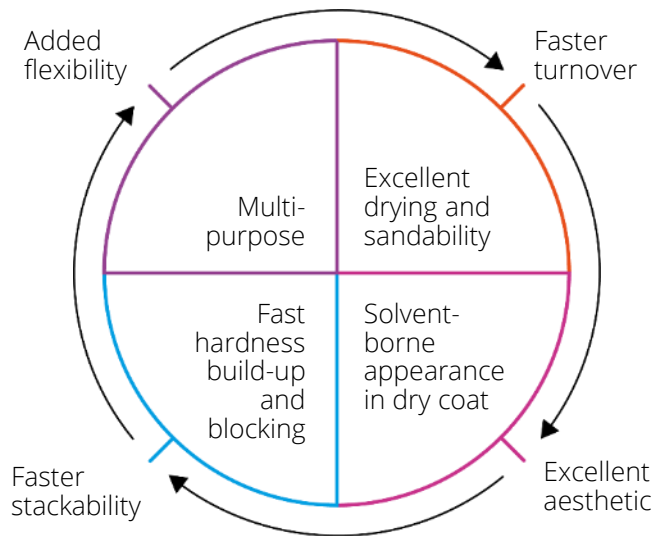
A self-cross-linking surfactant-free acrylic dispersion that offers excellent hardness, fast drying and good sandability and exceptional chemical resistance.

Applications

Highly transparent clear coats over light coloured substrates.

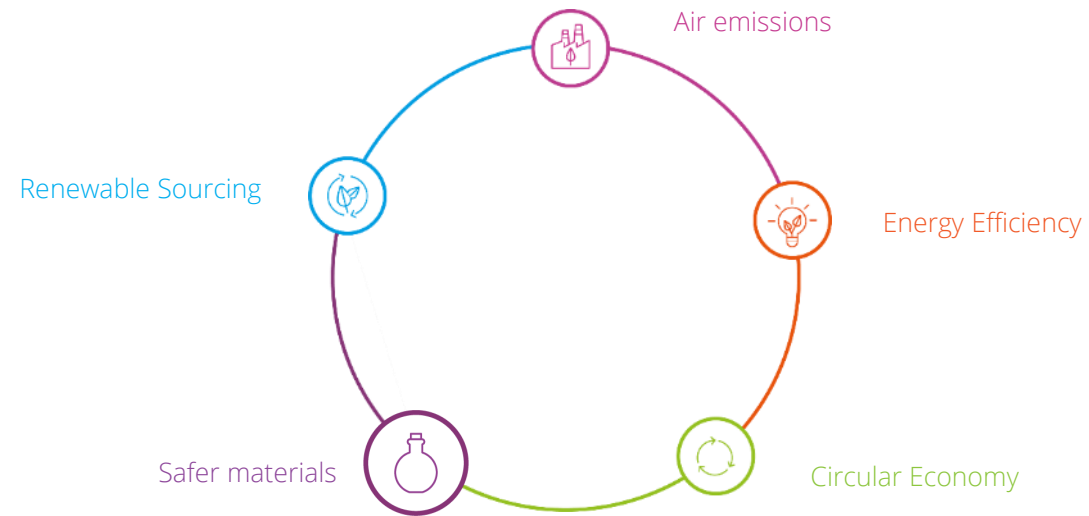


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6719

ECOWISE™ CHOICE

SETAQUA® 6719

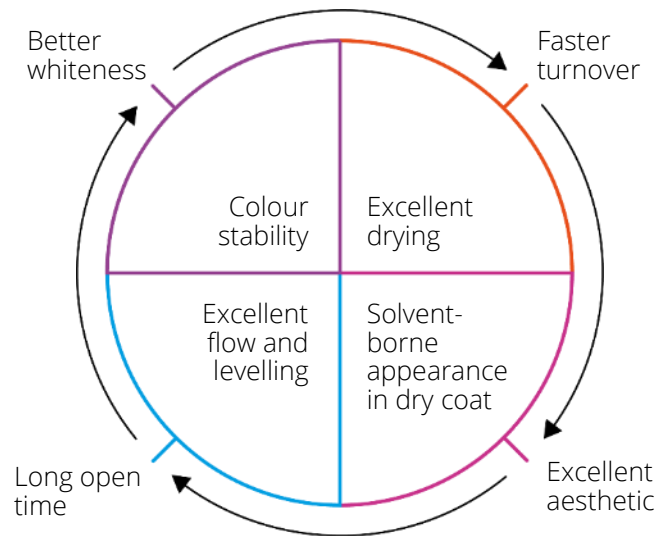
A self-cross-linking surfactant-free acrylic dispersion that offers excellent hardness, fast drying and good sandability and exceptional chemical resistance. Due to its small particle size, varnishes based on SETAQUA® 6719 have a solvent-borne like appearance of the dry coating.

Applications

Interior applications, primer and topcoat, furniture and trim paints.

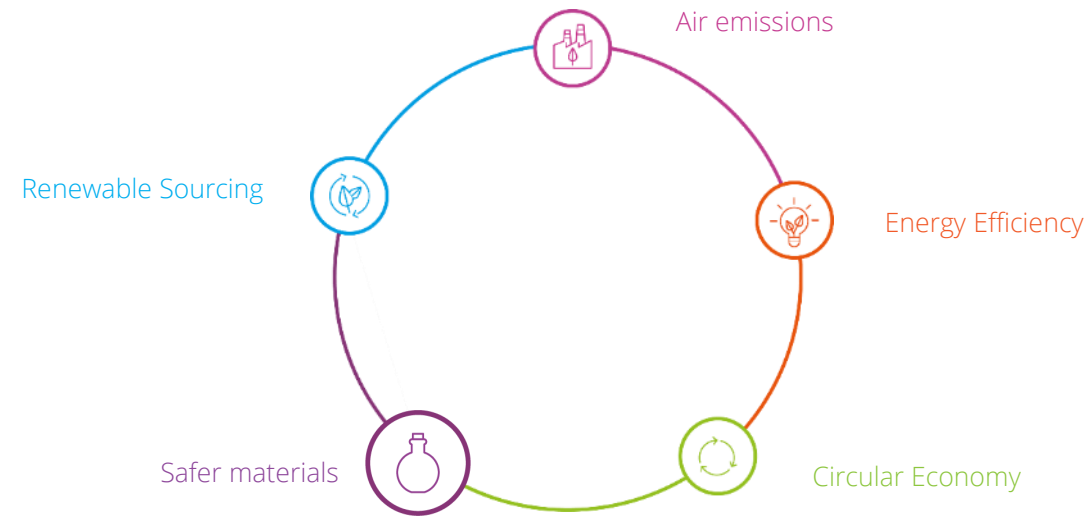


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6726

ECOWISE™ CHOICE

SETAQUA® 6726

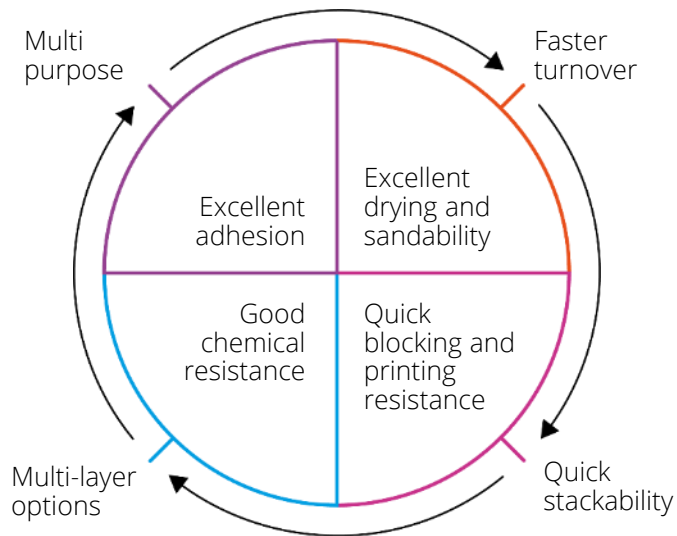
A self-cross-linking surfactant-free acrylic dispersion that offers excellent hardness, fast drying, good sandability and excellent anti-blocking with good transparency in clear coatings. Very good filling (such as on MDF), viscosity stability, sandability, and stackability within short drying process in pigmented paints.

Applications

Clear and pigmented wood coatings, primers and topcoat.

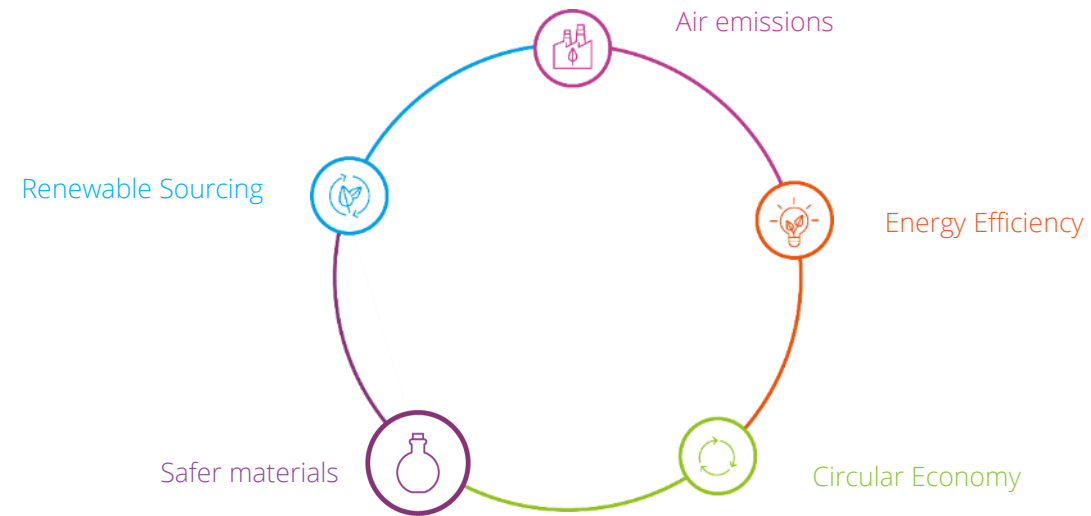


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6756

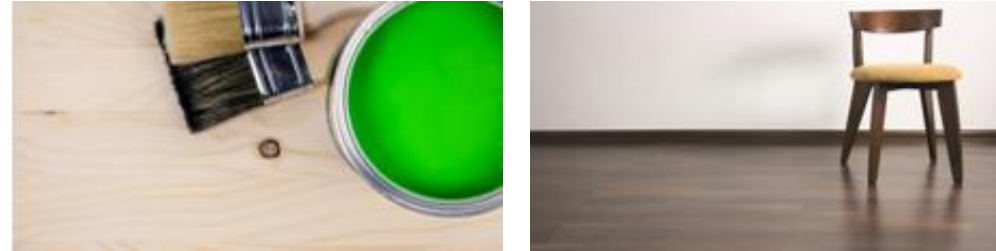
ECOWISE™ CHOICE

SETAQUA® 6756

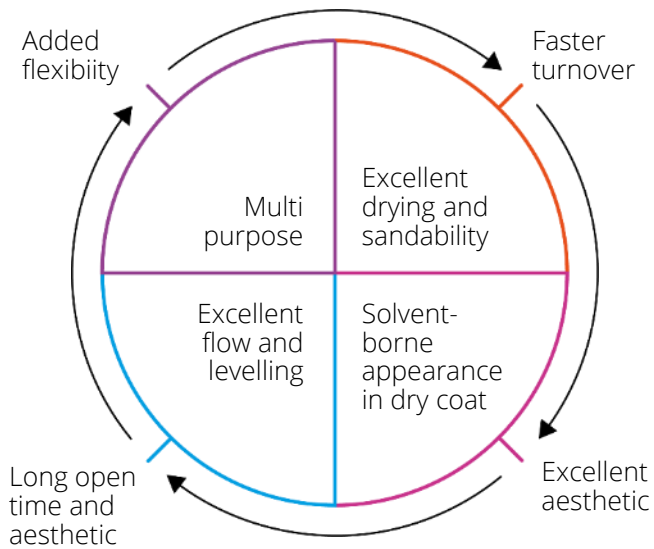
A self-cross-linking surfactant-free acrylic dispersion that offers excellent hardness, fast drying and good sandability and exceptional chemical resistance. Due to its small particle size, varnishes based on SETAQUA® 6756 have good in-can clarity and a solvent-borne like appearance of the dry coating.

Applications

Interior applications, primer and topcoat, furniture and trim paints.

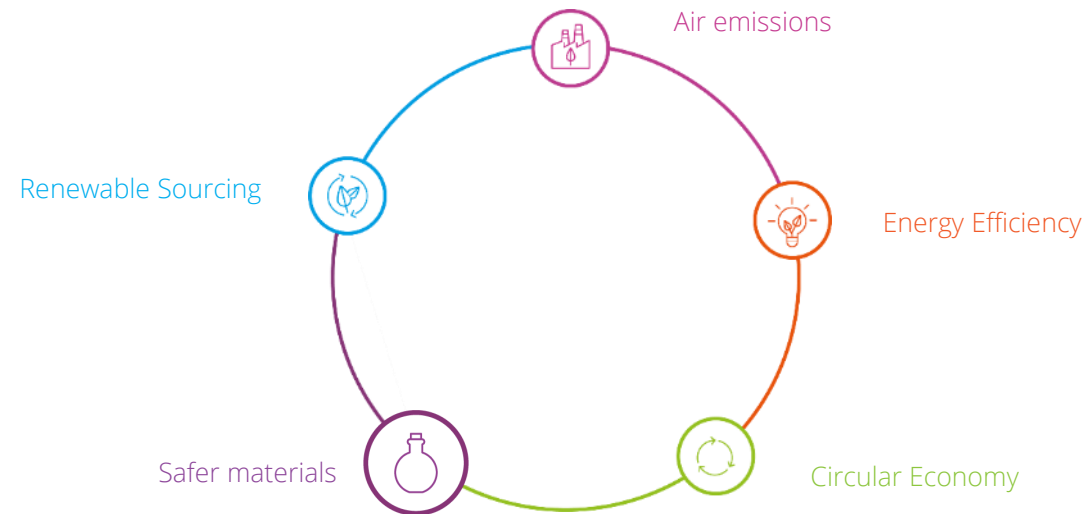


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



SETAQUA® 6799

ECOWISE™ CHOICE

SETAQUA® 6799

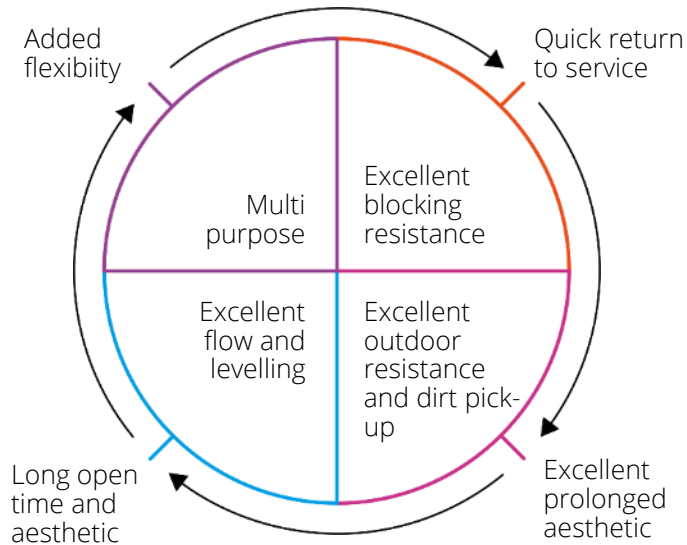
A self-crosslinking acrylic polymer dispersion with excellent blocking resistance when applied in thick films, good transparency and non-yellowing properties, good outdoor durability and dirt pickup resistance, long open time and low VOC formulations possible.

Applications

Interior & exterior applications for joinery and trim paints.

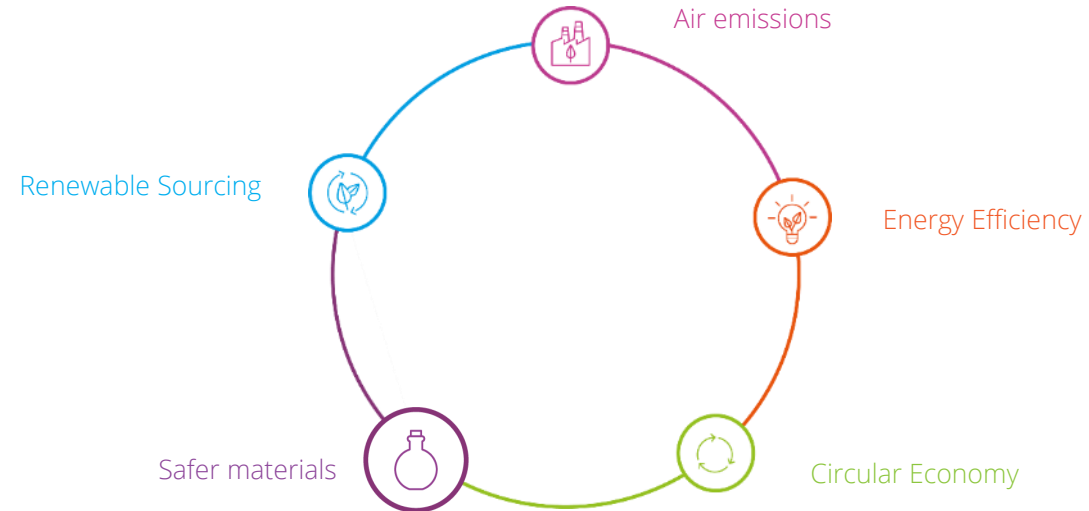


Key Performance Proposition



Key Sustainability Proposition

Safer raw materials



UNSDG no 12 : Responsible consumption and production



Glossary

Term	Definition
BU	Business Unit
C14	Radiocarbon, or carbon-14 (also written as 14C), is an isotope of carbon that is unstable and weakly radioactive. Recently living materials (the biobased component) have Carbon-14 while fossil fuel derived materials do not. Bio based carbon content of a product is determined by radiocarbon dating method (ASTM 6866) by analyzing the radioactive carbon content versus the total carbon content
CMR	Carcinogenic, Mutagenic or Toxic for Reproduction
ECHA	European Chemicals Agency
GHG	Greenhouse Gas. A gas that contributes to the natural greenhouse effect. The Kyoto Protocol covers a basket of six greenhouse gases (GHGs) produced by human activities: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Annex I Parties' emissions of these gases taken together are to be measured in terms of carbon dioxide equivalents on the basis of the gases' global warming potential. An important natural GHG that is not covered by the protocol is water vapor. Source: European Commission. Climate change: Glossary of common terms and acronyms. http://glossary.eea.europa.eu/EEAGlossary/G/greenhouse_gas
LCA	Life-cycle assessment (LCA) is a process of evaluating the effects that a product has on the environment over the entire period of its life thereby increasing resource-use efficiency and decreasing liabilities. It can be used to study the environmental impact of either a product or the function the product is designed to perform. LCA is commonly referred to as a "cradle-to-grave" analysis. LCA's key elements are: (1) identify and quantify the environmental loads involved; e.g. the energy and raw materials consumed, the emissions and wastes generated; (2) evaluate the potential environmental impacts of these loads; and (3) assess the options available for reducing these environmental impacts. Source European Commission. Climate change: Glossary of common terms and acronyms, https://www.eea.europa.eu/help/glossary#c4=10&c0=all&b_start=0&c2=lca
PAC	Product Application Combination, used to analyse a product in combination with the relevant market application to assess its sustainability value
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SPF	Starting Point Formulation. Recommended formulation for a product for use in a coating
SPM	Sustainable Portfolio Management
STOT RE	Specific target organ toxicity - repeat exposure (STOT-RE) means specific target organ toxicity arising from repeated exposure to a substance or mixture
UNSDG	United Nations Sustainable Development Goals
UV	Ultraviolet. UV curing or energy curing is a type of coating technology cured by ultraviolet radiation
WB	Waterborne. WB coatings are type of coating technology where the carrier is water

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