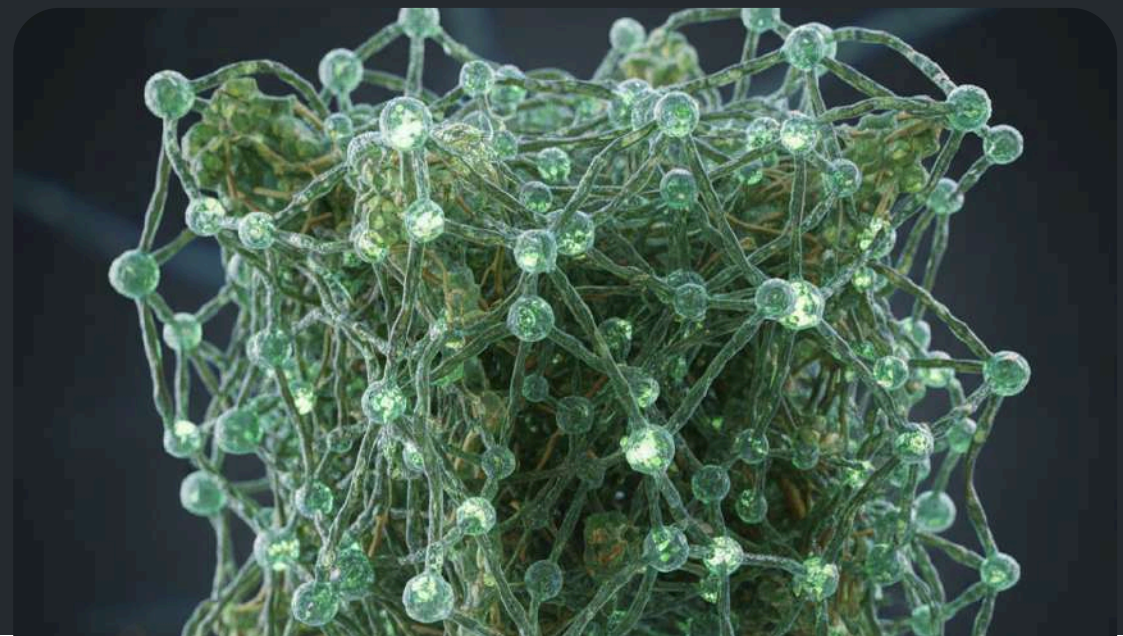
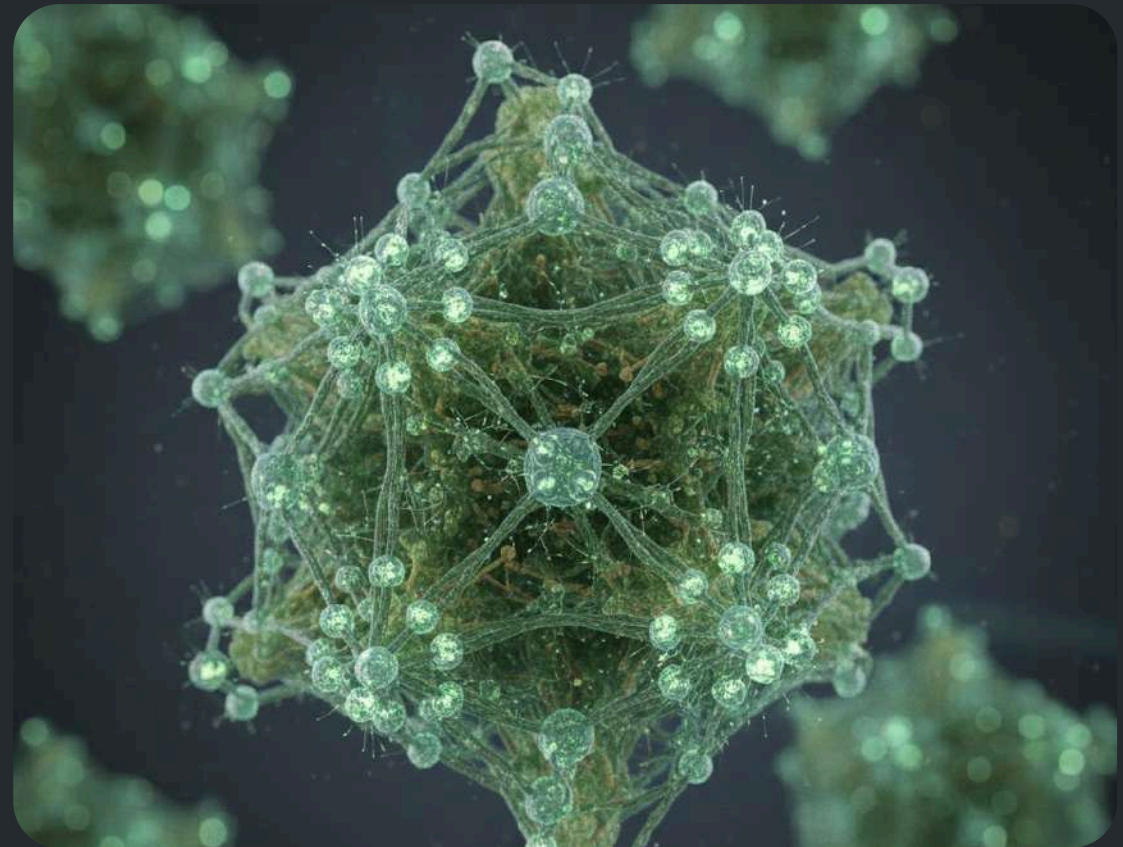
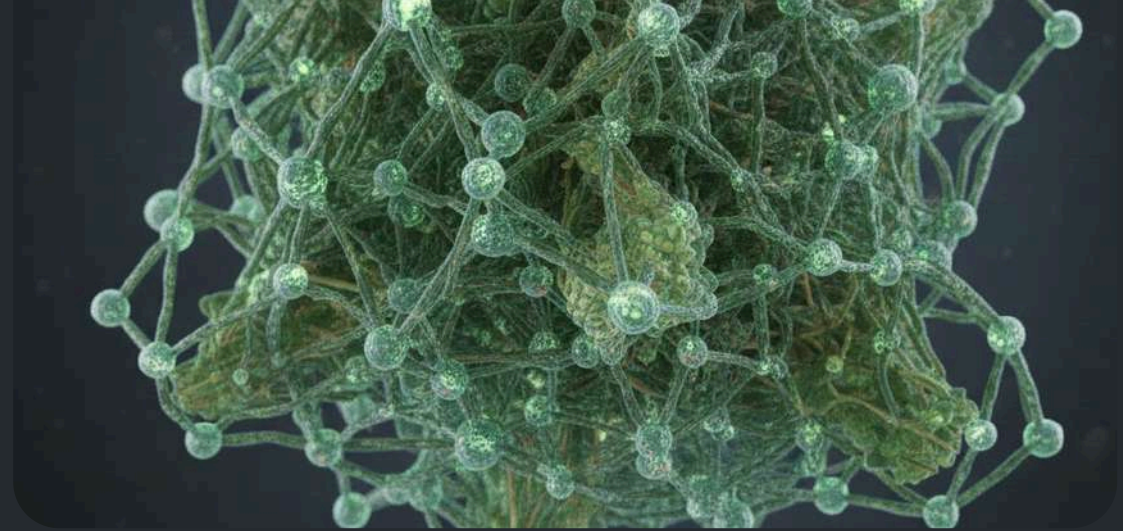
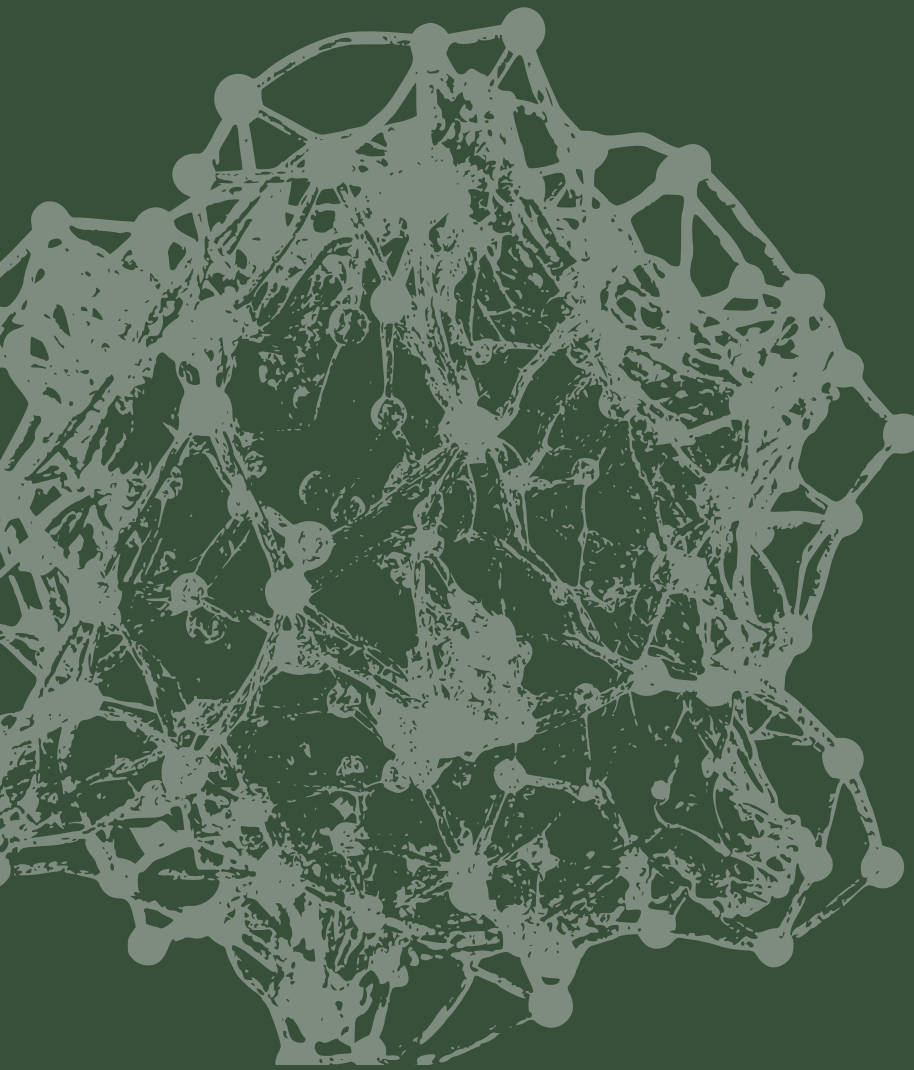


PRODUCT PORTFOLIO

GXP

BY ECDS





CXP is a non-toxic thermoplastic wood, that can be molded like plastic with heat and is hailed as an alternative to conventional plastic. CXP is produced by removing bound water from the raw wood and exhibits outstanding durability, wear resistance, and dimensional stability without the need for additional post-processing.

CXP enables precise molding and mass production due to its unique thermoplastic properties, offering high product quality and price competitiveness. It can also be processed by existing plastic injection molding equipment, allowing for a quick and easy transition in manufacturing. What is more, CXP is safe for both people and the environment in that it does not release any toxic substances during decomposition or combustion.

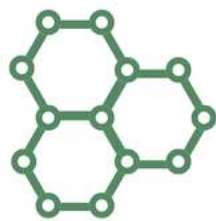


Building a Sustainable Tomorrow

ECDS joins forces with CXP to accelerate the transition to eco-friendly materials and reduce global plastic dependency. The partnership integrates ECDS's innovation-driven sustainability platform with CXP's bio-based polymer technology, replacing traditional plastics with cleaner, safer alternatives.

This collaboration also supports Carbon Neutralisation, Carbon Storage, Bio-CCUS (Bioenergy with Carbon Capture, Utilization, and Storage), and CCTS (Carbon Credit Trading Scheme) driving measurable impact in carbon reduction and sustainable manufacturing.

TYPES OF CXP



CXP-SD (SLOW DEGRADATION)

It is a commonly used grade with high durability, strength, and water resistance, making it capable of replacing most plastics



CXP-BD (BIO-DEGRADABLE)

The Degradation period can be adjusted from 1 month to 3 years. This makes it easy to produce short-term agricultural materials, single use items, and more.



CXP-AM (ANTI-MICROBIAL)

It has antimicrobial properties that inhibit the growth of bacteria and viruses. This makes it suitable for items that are frequently touched by many people.



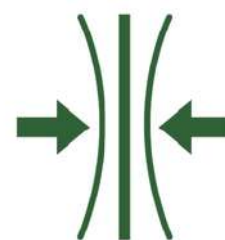
CXP-FR (FIRE RESISTANCE)

Details are available on request and against specific MOQ only



CXP-HI (HIGH IMPACT)

It is tough and strong, and does not break easily. It is suitable for parts that require frequent assembly or disassembly, and for products that demand high strength



CXP-EL (ELASTOMER)

It is soft and highly stretchable. The elongation rate can be adjusted by blending it with standard grades. It is suitable for products that require flexibility.



CXP-SF (SHEET FORMING)

This grade is suitable for blow moulding and vacuum forming of single-use items. It has excellent moldability, allowing for the production of a wide variety of products.



CXP-MB (MASTER BATCH)

It easily blends with other materials, minimizing property degradation and allowing the use of wood.

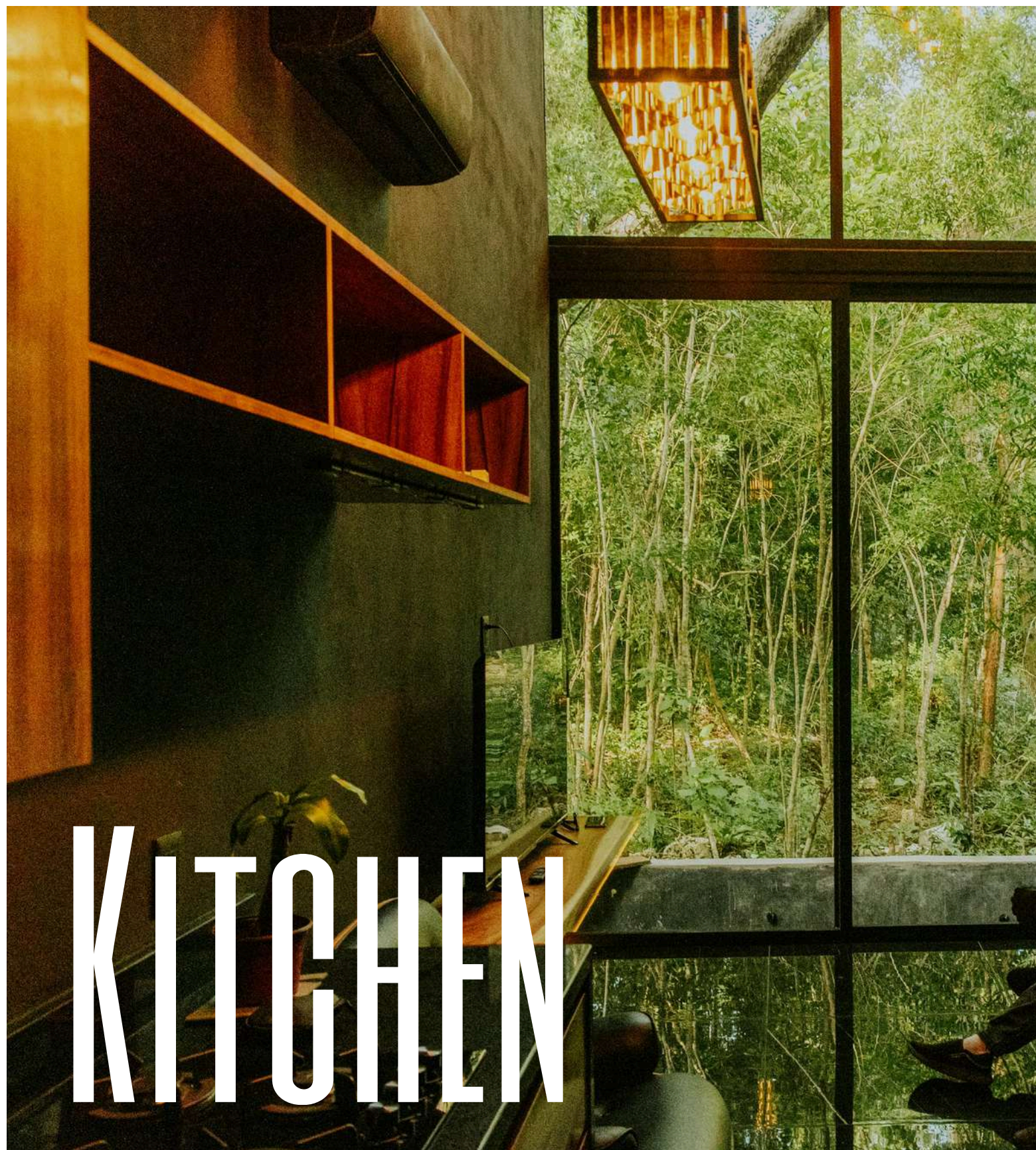
REPLACES VARIOUS PLASTICS

Just as there are various types of plastics under the name "Plastic", different product categories require different physical properties. CXP is continually expanding its applications through ongoing research and development to replace a wide range of plastics.

The unique texture of CXP bio polymer makes it more crafty, from Daily Objects to Kitchen Utensils, Bathroom to Offices space, and premium interior design range ... this bio Polymer does it all

PRODUCT CATEGORIES





KITCHEN

01

SIPSTACK & MUGS

CXP SipStack
CXP MugLife
Calm Mug

02

SIPCYLE

Brian Kim's Zero SipCycle
Zero SipCycle
Sodam SipCycle
CXP SipCycle

03

TRAYS

CXP NatureServe Tray
CXP EcoPlatter

04

PLATES

Round Plates
CXP GreenPan

05

CXP BIOBOX

06

CUTLERY

CXP Earthlery
Standing Spatula

07

CXP CHOP CYCLE

01

SIPSTACK MUGS &



CXP MugLife



CXP SipStack



CXP SipStack



CXP SipStack



Calm Mug





Sodam SipCycle



CXP SipCycle



Zero SipCycle



Brian Kim's Zero SipCycle



03,4 NATURESERVE PLATES &



CXP NatureServe



CXP EcoPlatter



CXP Green Pan



Round Plates

04,5,6 EARTHLERY BIOBOX & CHOPCYCLE



CXP Earthlery



CXP Earthlery



Standing Spatula



CXP ChopCycle



CXP BioBox



CXP BioBox



OFFICE

01
CXP ECO NEST

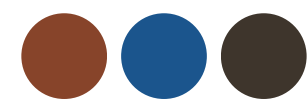
02
CXP ECOSCRIPT
GEL PEN
BALL POINT PEN



ECOSCRIPT ECONEST &



CXP EcoScript
Ballpoint Pens



CXP EcoNest



CXP EcoScript
Gel Pens





DAILY ESSENTIALS

01
CXP GREEN GRIPS

02
VERA BLOCKS

03
VERA CUBES

04
HAND & ROUND MIRRORS

DAILY ESSENTIALS



Vera Blocks



Hand Mirrors



Round Mirrors



Vera Cubes



CXP Green Grips





01
**CXP ECOGRIN &
BRUSHNEST**

02
CXP LEAF N CLEAN

03
FLOSS

04
SOAP TRAYS
Oval Soap Tray
CXP Bubble Nest

05
CXP ECOMANE
Square Hand Brush
Round Hand Brush



BATHROOM



CXP Brush Nest



CXP EcoGrin



CXP Leaf n Clean



Floss



CXP EcoMane
Square Hair Brush



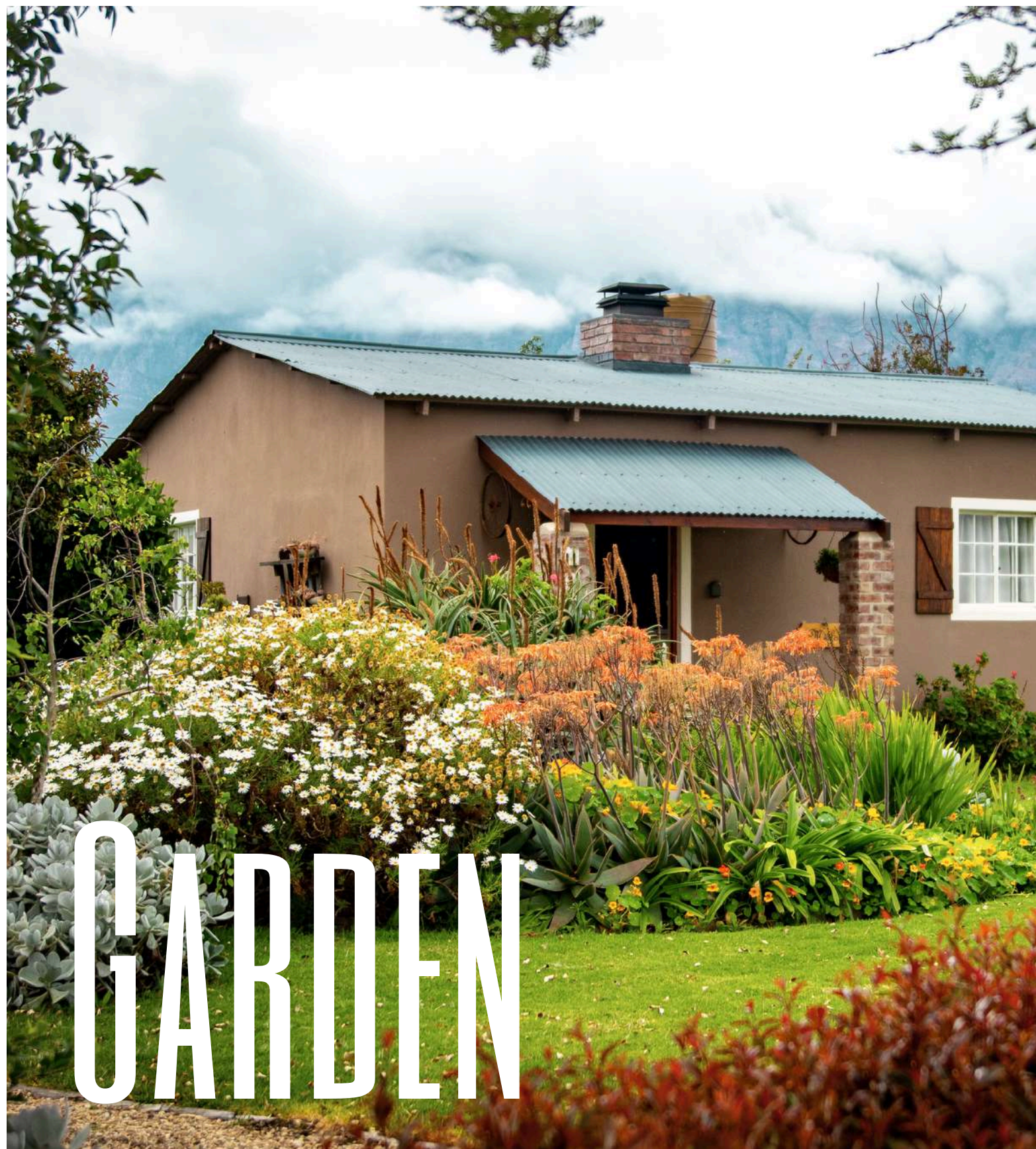
CXP EcoMane
Round Hair Brush



CXP Bubble Nest



Oval Soap Tray



GARDEN

01
CXP ROOT WISE

02
CXP VERDICLE



ROOTWISE VERDICLE &



CXP Root Wise



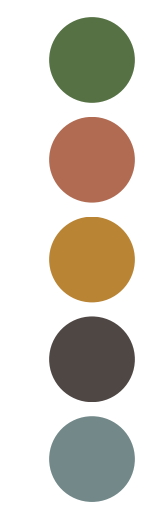
CXP Root Wise



CXP Root Wise



CXP Verdicle





01
SUSTAINASTEP FLOOR

02
SUSTAINASWING DOORS

03
STOOLS

04
MONITOR BASE

05
MULTIPURPOSE SUPPORT

06
WALL ART

07
HEXA NEST

08
CXP PLANKET

01,2 SUSTAINASTEP & SUSTAINASWING



Interior Decor Wood Assemble



Sustainastep Floor



Sustainaswing Door

03,4,5
STOOL
BASE &
SUPPORT



Wood Stool



Monitor Base

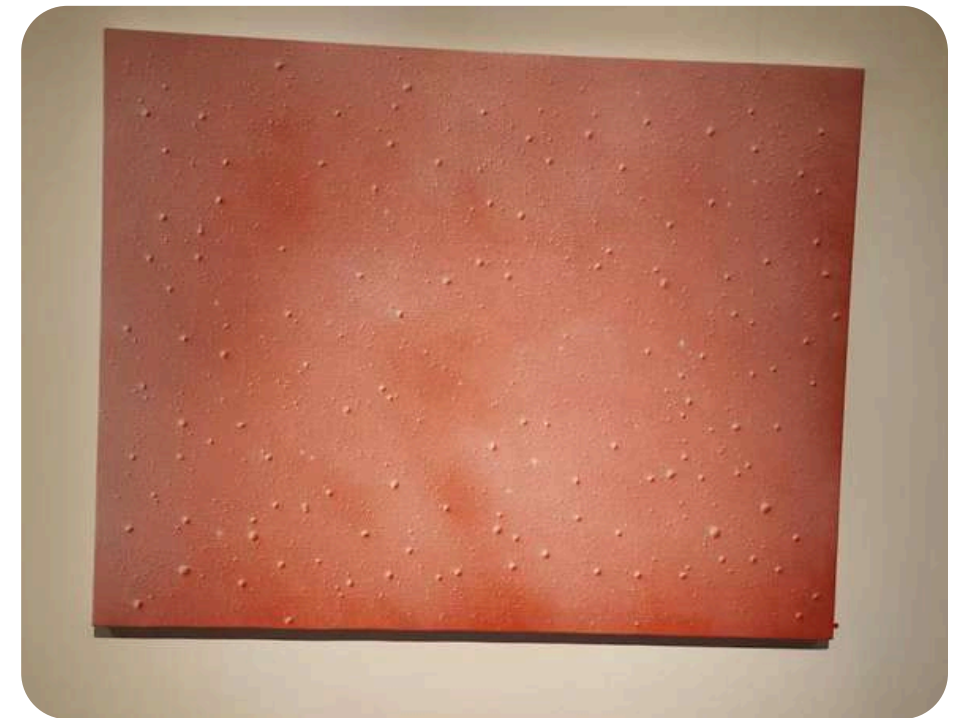


Multipurpose Support

06

Textured

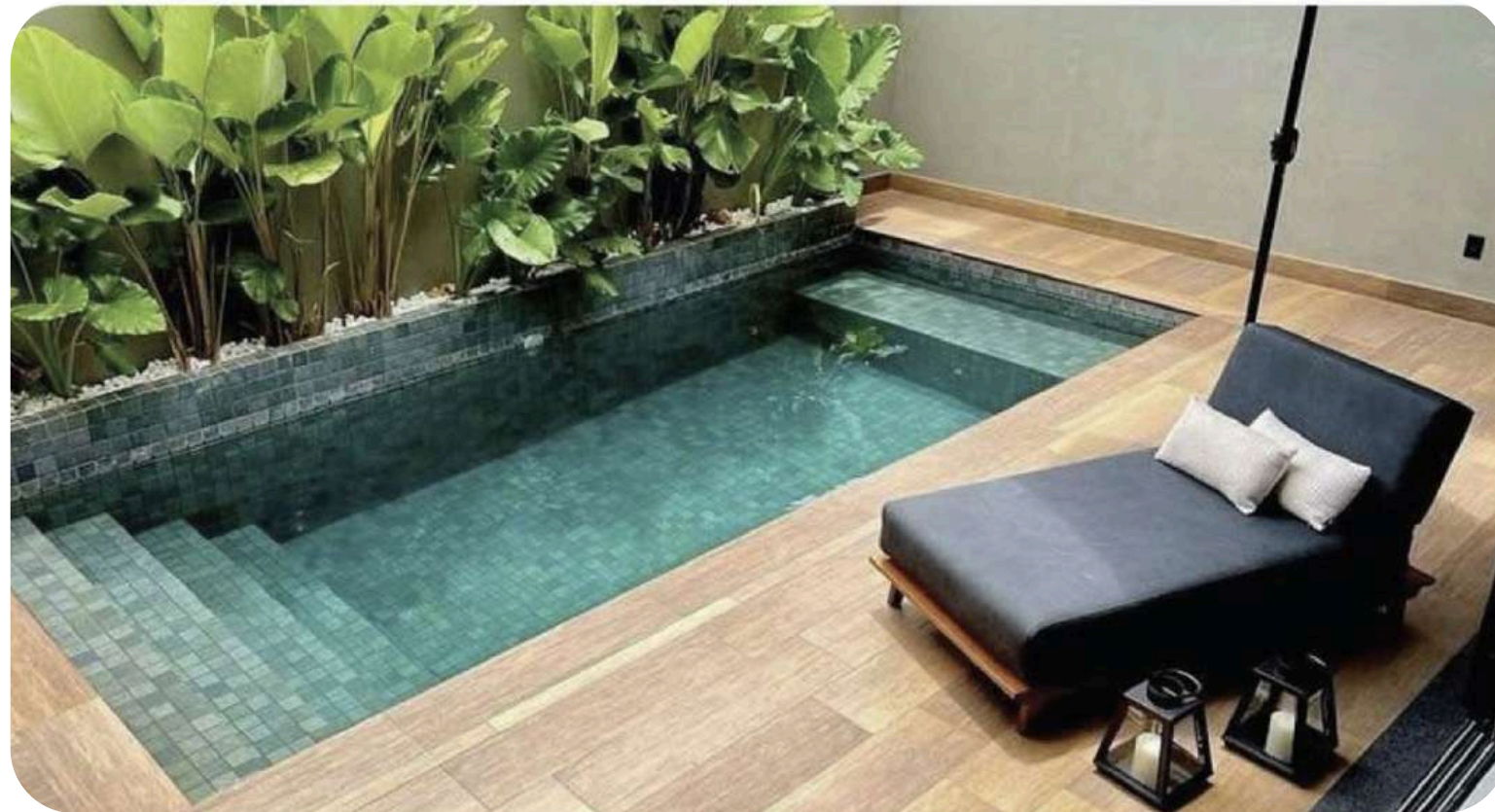
WALL
ART



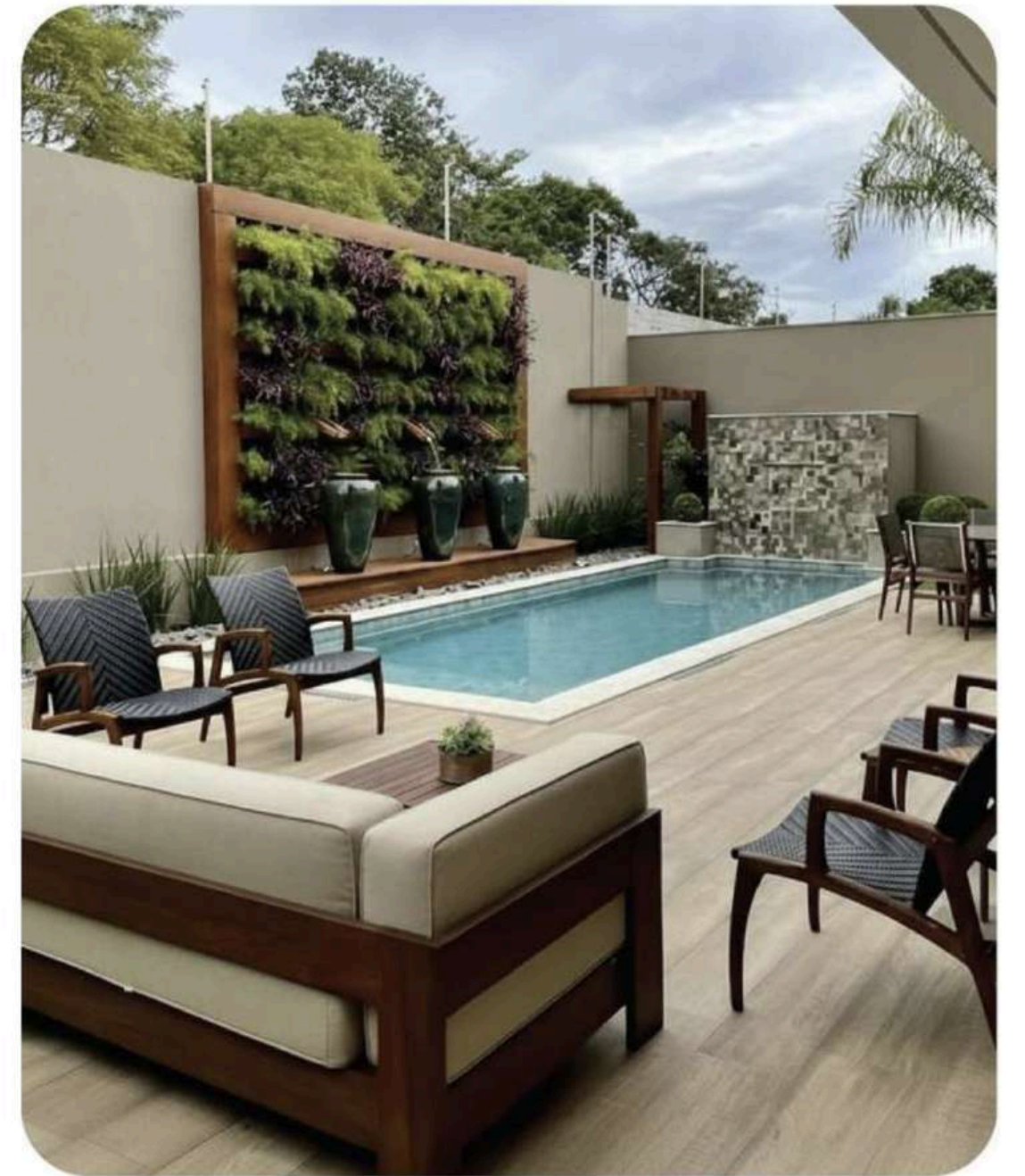
06 HEXA NEST WALL RACKS DECOR &

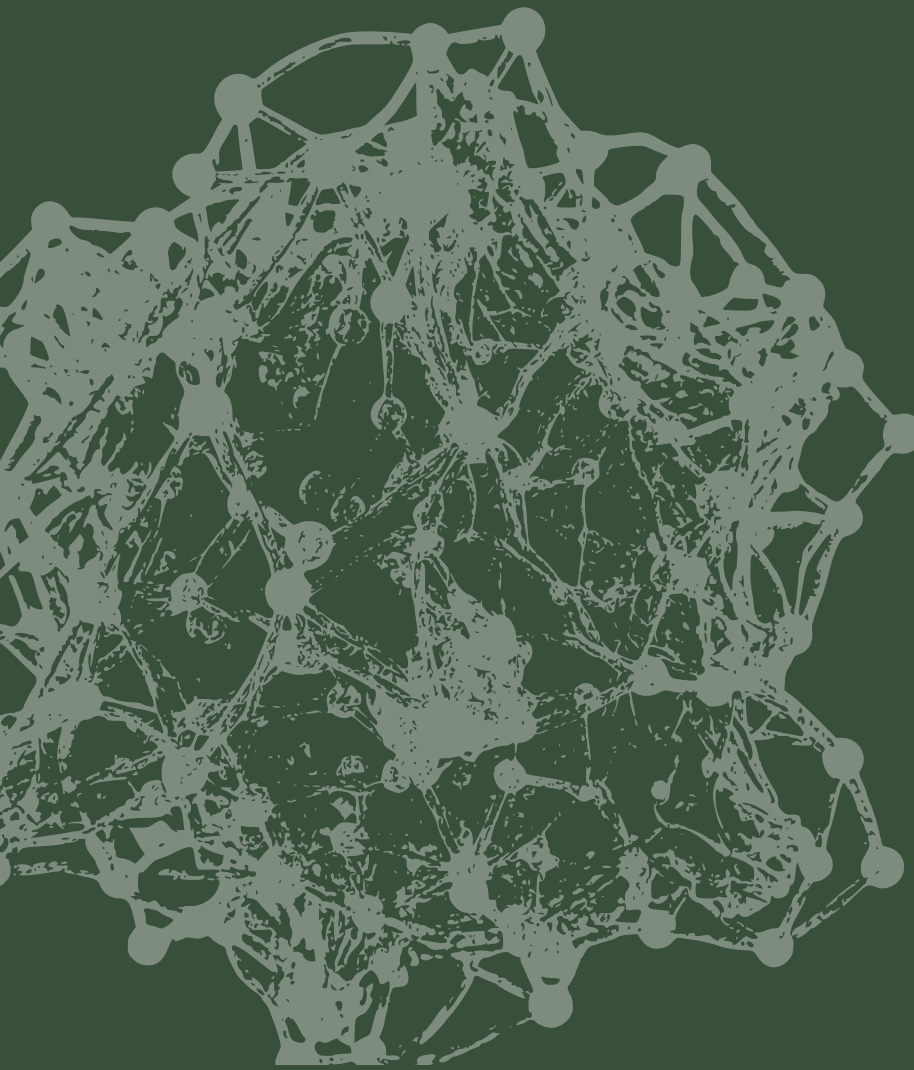


07
GXP
PLANKET



Covering your poolside with green innovation.





ISO CERTIFICATIONS

ISO 14025:2006
ISO 14040:2006
ISO 14064-1:2018
ISO 14067:2018
ISO 14001:2015
ISO 9001:2015



All CXP Products are certified and tested for the following traits or characteristics that make it a unique and a cost effective

alternate to Plastics

BIODEGRADABLE
HEAT RESISTANT
MOISTURE RESISTANT
NON-TOXIC
MICROWAVE SAFE

& Stores Carbon



OTHER CERTIFICATIONS



PEFC (Programme for the Endorsement of Forest Certification) certification promotes sustainable forest management through independent third-party certification, ensuring that products come from responsibly managed forests



SGS
 Test Report Number: F690101/LF-CTSAYHA23-00366 Issued: 2023. 01. 17 Page: 2 / 2

Test Results

Tested Item	Test Result *
High-frequency test	No abnormality found in appearance

* Judgment on changes in appearance
 Sample Classification
 1. CXP Airtight Container

Test method: 1) Run for 3 minutes in a 700W frequency microwave oven.
 2) After the sample is removed from the microwave, it is left at room temperature for 1 minute and then checked for any changes in appearance.

Test environment: High-frequency output: 700W
 Ambient temperature: (23 ± 2)°C, (50 ± 5)% relative humidity

Test equipment: Samsung microwave oven (model name: MS23K3513AW), stopwatch.

Photo of the received sample:

AYHA23-00366

Microwave Safe

Certificate of Bio-CCUS
 CERTIFICATION NO: CEIDeC-251014R74
 EFFIBAR CDS PVT. LTD.(ECDS)
 GSTIN: 07AAECE2139B1Z6

Biomass Ratio
 25.75%
 74.25%
 1.134 kgCO₂e/kg

BIO-CARBON CAPTURE, USE & STORAGE
 1.134 kgCO₂e/kg
 CEIDeC-251014R74

- Name of product: CXP-SD
- Production period: 2025.09.30. - 2025.10.01.
- Total amount of certified product: 2,000.5 kg
- Maximum GHG storage equivalent from the total amount of certified product using the bio-based material: 2,248.908 kg CO₂e
- Date of Issue: 2025.10.14.

Authorized by
 Chungcheong Eco-Industrial Development Center
 Yong Un Ban, Ph.D.
 Executive Director

E9-843, Chungdae-ro 1, Seowon-gu, Cheongju-si, Chungcheongbuk-do 28644, Republic of Korea
 Tel. +82-43-249-1328

CCUS, or Carbon Capture, Utilization & Storage

OTHER CERTIFICATIONS

KCL TEST REPORT

1. NO : 19-04-0210
 2. Client : Dongrae Ize Inc.
 3. Date of Test : 2020.11.04 - 2020.11.18
 4. Use of Report : -
 5. Test Sample : CXP (Cellulose X-Linked Polymer) R.G.Block
 6. Test Method : (1) KS R 1091:2015
 7. Test Results : CXP (Cellulose X-Linked Polymer) R.G.Block

Test Item(s)	Unit	Test Method	Test Results	Remark	Lot
Di-butylphthalate(DBP)	mg/kg	(1)	Not detected (detection limit: 50)		
Di-butyltinphthalate(DBT)	mg/kg	(1)	Not detected (detection limit: 50)		
Di-ethylhexylphthalate(DEHP)	mg/kg	(1)	Not detected (detection limit: 50)		
Di-n-octylphthalate(DNOP)	mg/kg	(1)	Not detected (detection limit: 50)		
Di-(iso-nonyl)phthalate(DINP)	mg/kg	(1)	Not detected (detection limit: 50)		
Diisodecylphthalate(DIOP)	mg/kg	(1)	Not detected (detection limit: 50)		

2020.11.18
 Korea Conformity Laboratories President Yoon, Kap Seok
 Accredited by KILAS, Republic of Korea

Plasticizers Free

KSTR 한국표준시험연구원 Korea Standard Test Researcher

1F, 34-6, Geongni-ro 83beon-gil, Heungdeok-gu Cheongju-si, Chungcheongbuk-do, Korea
 T : 1600-6687 F : 043-901-0003
 homepage : http://www.kstr.or.kr

Test report

Request No : 20K2401C03 Request date : 2020. 11. 24.
 Report No : KS120K09102017 Issue date : 2020. 12. 07.

Company : Woodlead Purpose of use : Quality control
 Address : #302, 7, Yongso-ro 46beon-gil, Seo-gu, Daejeon, 35369, Rep. of KOREA
 Person : Taehwan Kim
 Submit Company :
 Name of Sample : VehicleStrap / CXP (Cellulose X-Linked Polymer)

Test item	Test result	
	Control	Sample
KSMISO 22196		
<i>Staphylococcus aureus</i> ATCC 6538P	inoculum 1.7 × 10 ⁸	< 0.63 99.999 6.6
<i>Escherichia coli</i> ATCC 8739	inoculum 2.4 × 10 ⁸	< 0.63 99.999 6.8

Standard film : Sterilized stomacher film
 Dose of inoculum : 0.4 mL

2021.06.18
 Korea Conformity Laboratories President Yoon, Kap Seok

Anti-Microbial

KCL TEST REPORT

1. NO : 021-00378E
 2. Client : Dongrae Ize Inc.
 3. Date of Test : 2021.06.04 - 2021.06.18
 4. Use of Report : -
 5. Test Sample : CXP RBlock
 6. Test Method : (1) IEC 62321-5:2013 (2) IEC 62321-4:2013 (3) KS C IEC 62321:2009 (4) IEC 62321-6:2015

2021.06.18
 Korea Conformity Laboratories President Yoon, Kap Seok

RoHS Test

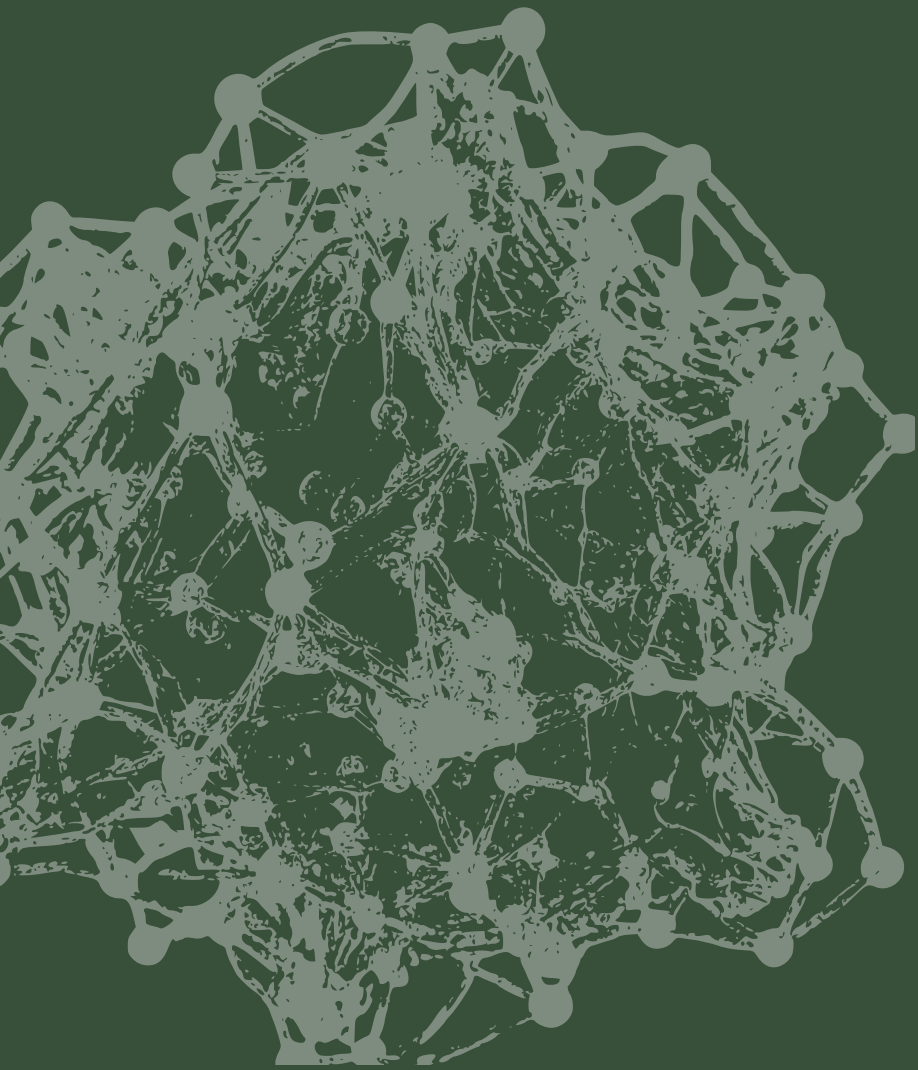
KCL TEST REPORT

1. NO : 022-00093E
 2. Client : Dongrae Ize Inc.
 3. Date of Test : 2022.01.03 - 2022.01.18
 4. Use of Report : Submission
 5. Test Sample : CXP Cup
 6. Test Method : (1) Standards and Specifications for Food Utensils, Containers and Packages.

Test Item(s)	Unit	Specifications	Test Method	Test Results	Remark
Extraction Lead(Pb)	mg/L	Not more than 1	(1)	Not detected	-
Extraction Arsenic(As)	mg/L	Not more than 0.1	(1)	Not detected	-
Extraction Cadmium(Cd)	mg/L	Not more than 0.3	(1)	Not detected	-
Extraction Chromium(Cr)	mg/L	Not more than 1.0	(1)	Not detected	-
Extraction Copper(Cu)	mg/L	Not more than 0.5	(1)	Not detected	-
Extraction Nickel(Ni)	mg/L	Not more than 0.5	(1)	Not detected	-

2022.01.18
 Korea Conformity Laboratories President Jo, Yung Taq

Food Contact



CXP Products can be customized with laser engraving, which burns the surface to embed your desired message. You can engrave logos or text according to the product size to commemorate special moments. The natural feel of the laser engraving as opposed to printing, adds a unique and sentimental touch.

LASER ENGRAVING





IN FOCUS

ECDS CXP Product range is carefully designed to support the United Nations Sustainable Development Goals. Bearing sustainability at our roots, ECDS CXP Product Range resonates perfectly with the following UN SDGs



EXP

BY ECDS

CONNECT WITH US

www.ecds.co.in

