

Solutions for Efficient Plastics Processing

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POL Segment, Omya Asia, Middle East and Africa

New Omya Products to address Challenges in Compounding

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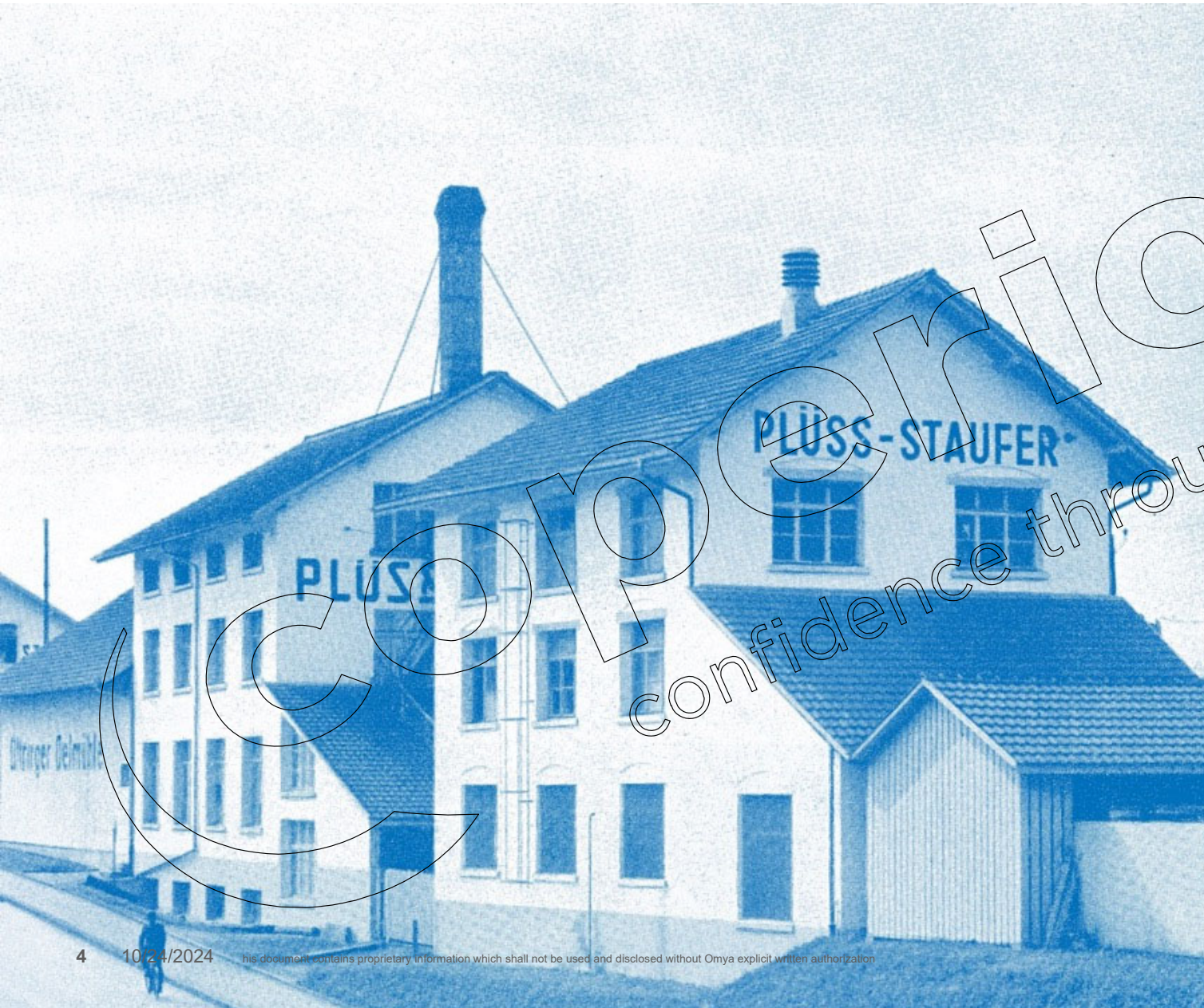




Making life better
through our passion
for minerals and chemistry

confidence through partnership





Thinking of
tomorrow
since 1884

Founded by
Gottfried Plüss and
Emma Stauer.
140 years of
innovation.



About Omya

Omya is a leading global producer of essential minerals and a worldwide distributor of specialty materials.



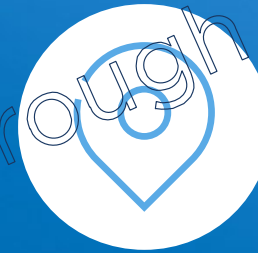
160 plants in
50 countries



9,000
employees



Privately
owned



Headquartered
in Switzerland



CHF 4 billion
turnover

New Omya Products to address Challenges in Compounding

Industries we serve



Adhesives and sealants



Agriculture



Air treatment



Building and construction



Engineered materials



Food, pharma and nutrition



Packaging



Paints and coatings



Personal care and home care



Polymers



Pulp and paper

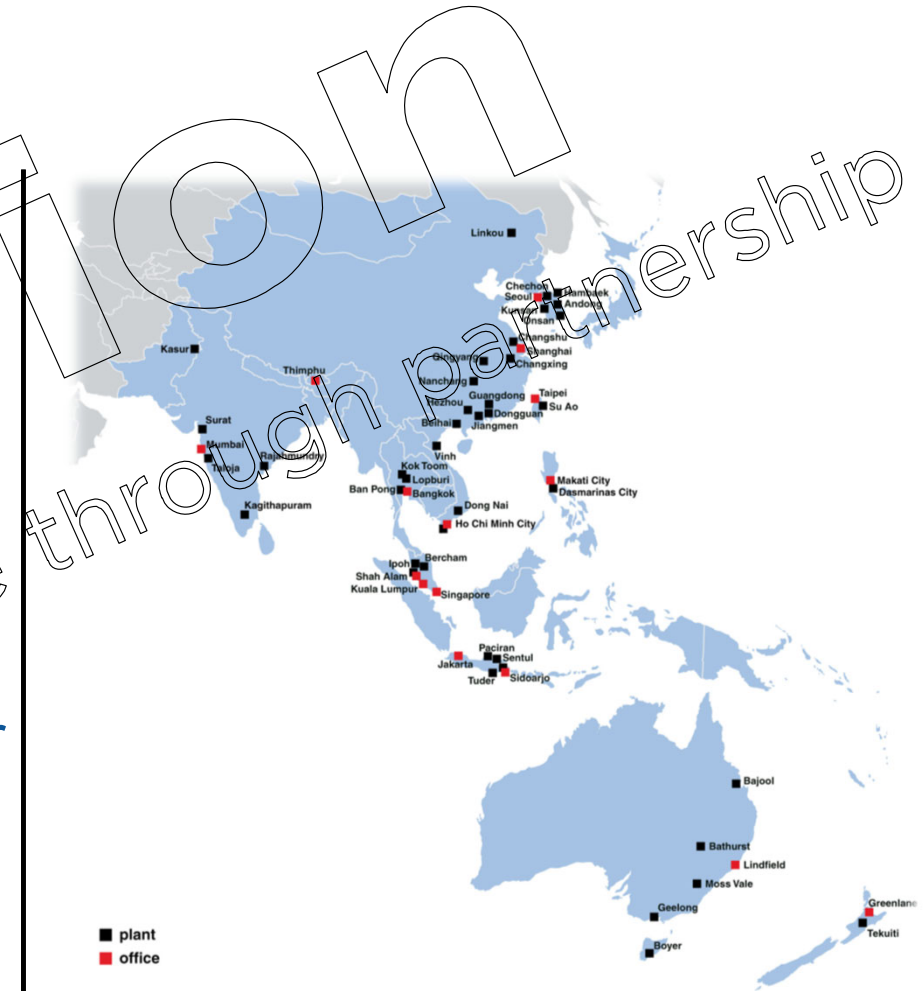


Water treatment



Omya in Asia Pacific – Introduction

- Regional HQ in Kuala Lumpur & Singapore
- Over **40** offsite plants; **13** slurry onsite plants in operation and **more** onsite plants under construction
- **19** offices in **14** countries
- **1** regional state-of-the-art technical center in Singapore and plenty of plant laboratories.
- **3500** employees, including contractors



NEW OMYA PRODUCTS TO ADDRESS CHALLENGES IN COMPOUNDING

Solution provider for our customers and partners

Polymer Lab Oftringen

- Dedicated polymer competence center, support global activities

Omya Tech. Center Singapore

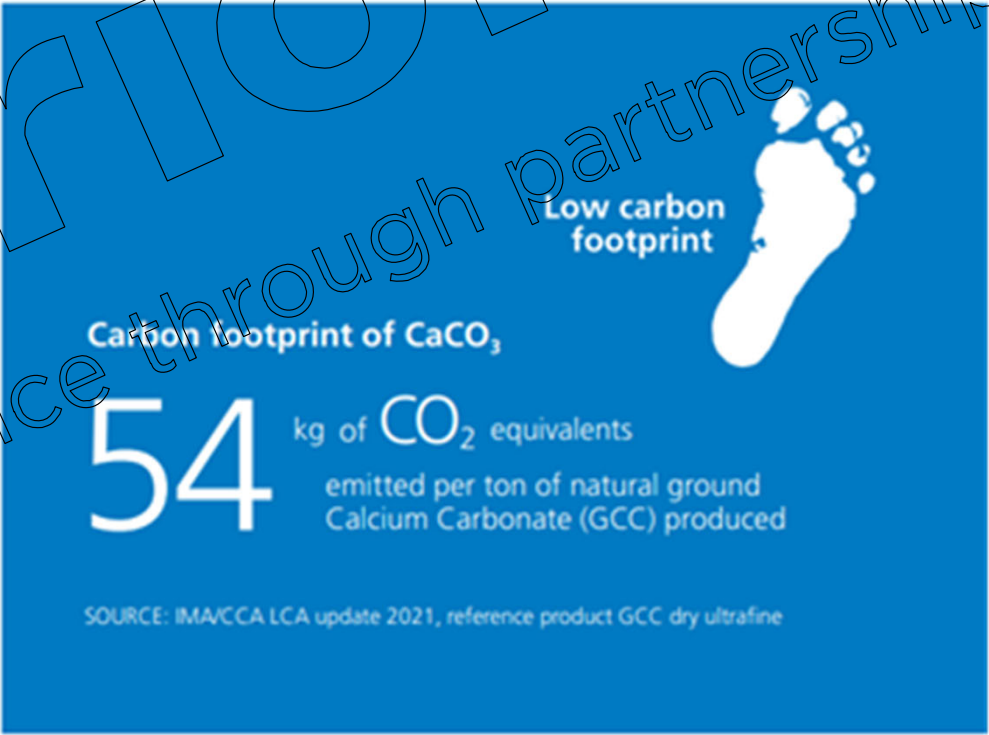
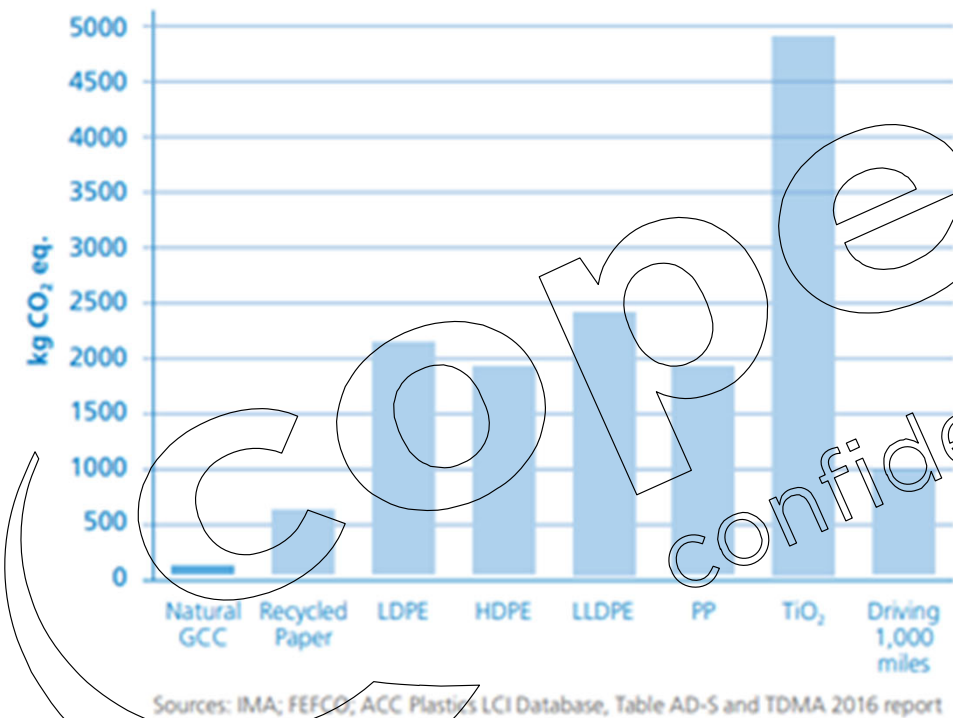
- Support activities in Asia Pacific

Omya Tech. Center Cincinnati

- Support activities in America



Sustainability



About Omya Korea

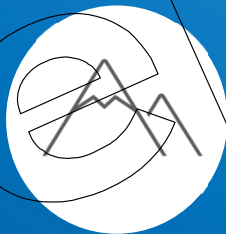
- Omya Korea is the local subsidiary of Omya, a leading global producer of essential minerals and a worldwide distributor of specialty materials.



Since
1971



5
plants



5
mines



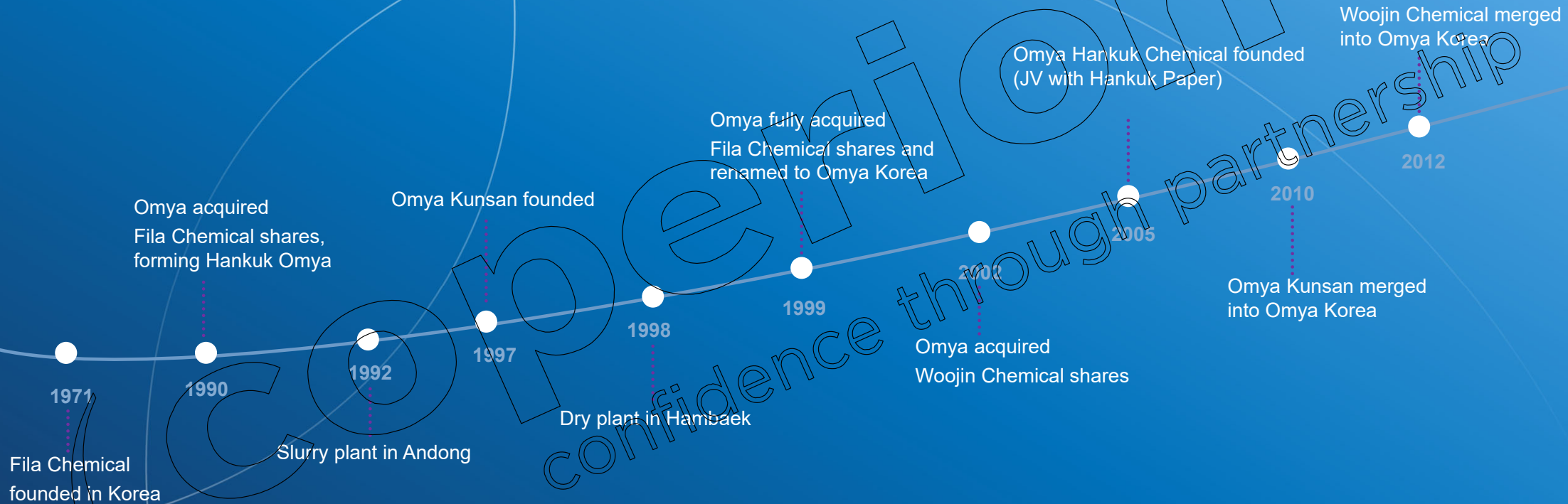
200
employees



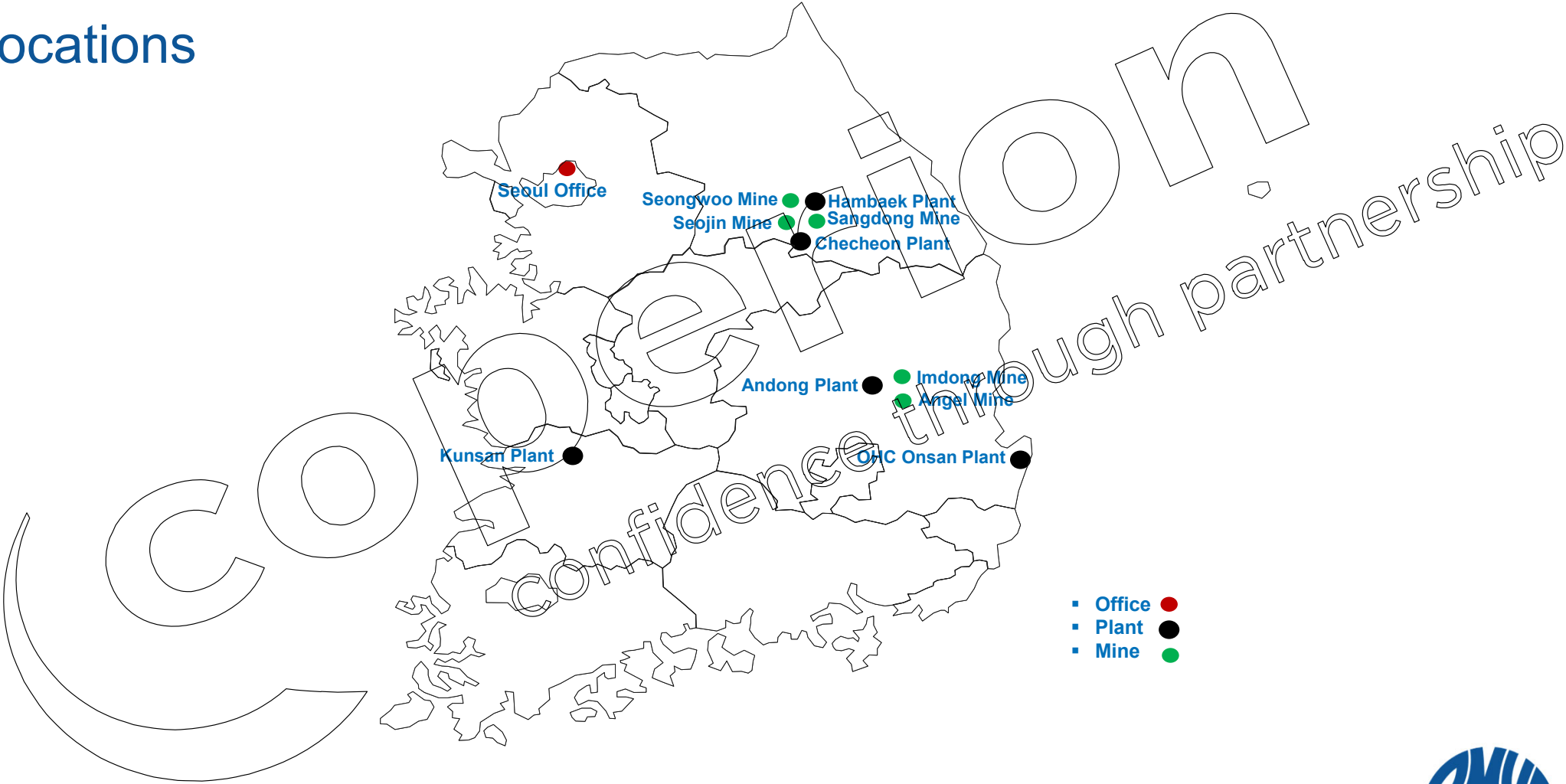
Office
in Seoul

About Omya Korea

■ SINCE 1971



Locations



Working with Omya

Distribution Business

- Partners with leading blue-chip manufacturers of specialty materials.
- Offer a full portfolio of pigments, binders and additives.
- Distribution of Engineered materials and specialty ingredients
- Technical support, regulatory advice and application development.

PARTNERS IN
DISTRIBUTION.



Omya's Innovation to Address Compounding Challenges

Ashish Bhatt| OCT 2024

Head of Technical Service

POL Segment, Omya Asia, Middle East and Africa



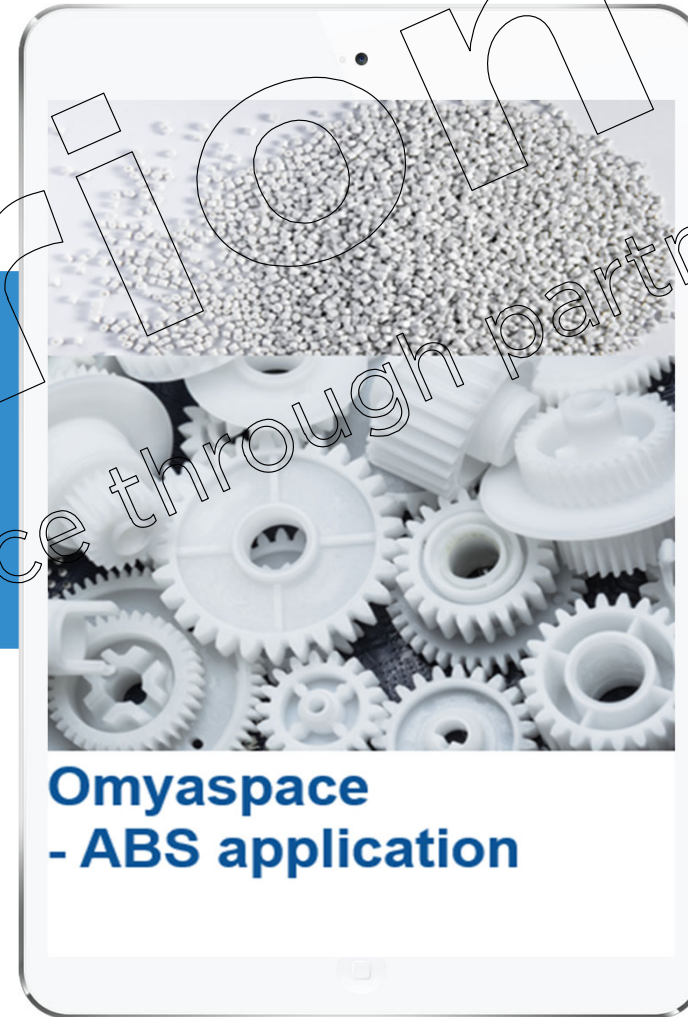
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NEW OMYA PRODUCTS TO ADDRESS CHALLENGES IN COMPOUNDING

Advance Omya Solutions for Compounding



NEW OMYA PRODUCTS TO ADDRESS CHALLENGES IN COMPOUNDING

Advance Omya Solutions for Compounding



Omya Polymers
omya.com

Omya Smartfill

Improves engineering polymers with lower overall costs and reduced environmental impact





Omya Polymers
omya.com

Fibers & Nonwovens

Omya Calcium Carbonate for PP Spunmelt and Dry-Laid Nonwovens



Omya Polymers
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Omyaloop FC

Certified Recycled Calcium Carbonate for the Polymer Industry



Omyasphere 900

Hollow Glass Microspheres (HGM)



Omyasphere® 900

Hollow glass microspheres
for complex problems



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The Power of Light Materials

Why Choose Omyasphere 900?

- Weight Reduction
- Higher Yield
- Dimension Stability
- Thermal Insulation
- Sound Deadening
- Total System Cost Saving

New Omya Products to address Challenges in Compounding

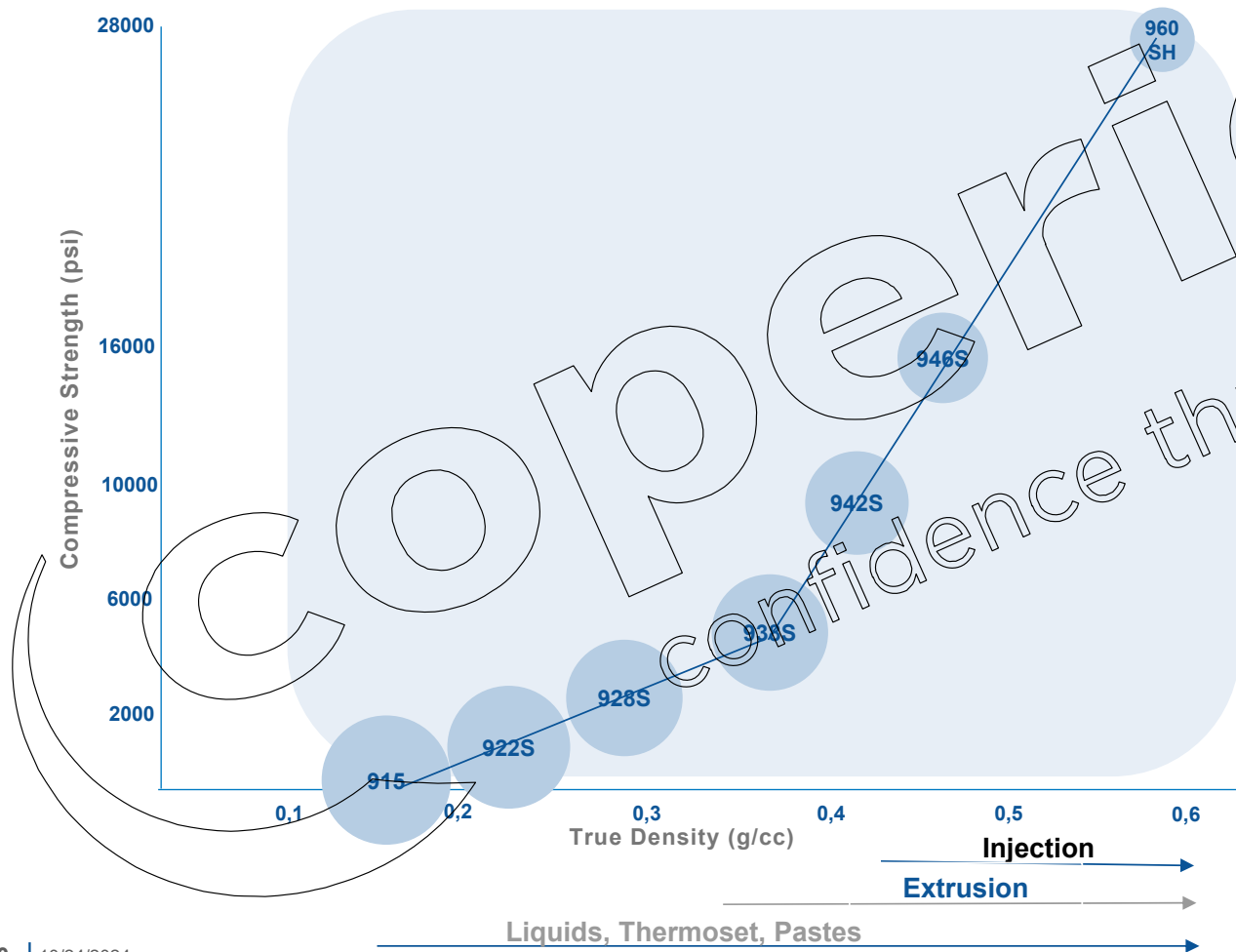
Omyasphere 900 : Key Targeted Applications



Additional targets: Automotive putties/ Body filler, Casting, Tooling Boards, Electronics...

New Omya Products to address Challenges in Compounding

Omyasphere 900 Positioning



- Strength
- Particle Size
- Cost-in-use



Omyaspace- ABS application



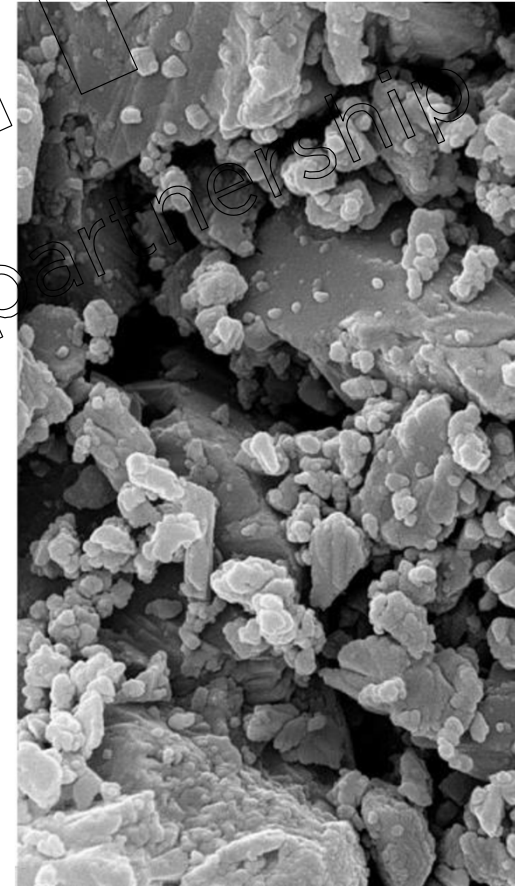
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Typical Properties of Omyaspace 806

- Natural highly pure, ultra fine ground treated calcium carbonate
- Tailored particle size distribution
- Optimized surface treatment
- Excellent dispersion properties in ABS polymer
- Enhanced processability, optimized compatibility



Formulations

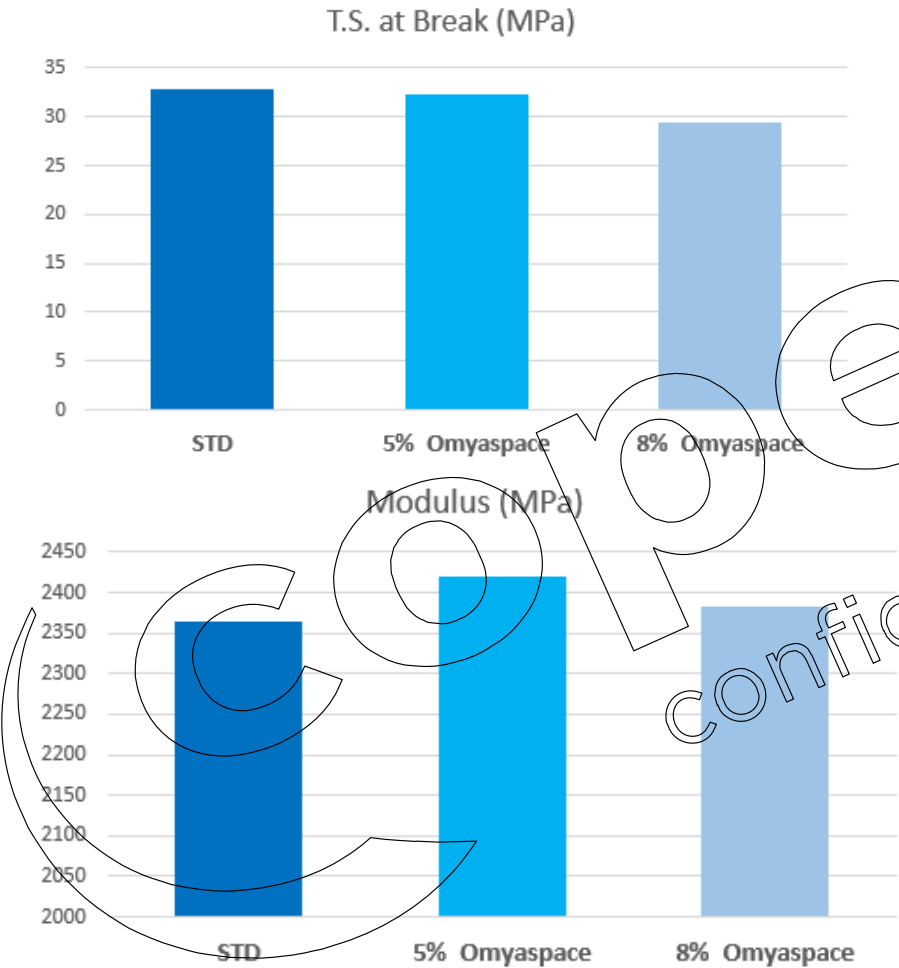
Raw Material	STD	Omyaspace 806	
	Exp 1	Exp 2 – 5%	Exp 3 – 8%
Grafted Rubber	25	25	24
SAN	70.7	66.95	64.95
TiO2	2.25	1	1
Thermal Stabilizer	0.15	0.15	0.15
Lubrication	1.5	1.5	1.5
Other Additives	0.4	0.4	0.4
Omyaspace 806		5	8

“

Formulation modification is required to get all benefit of Omyaspace 806



Tensile Properties

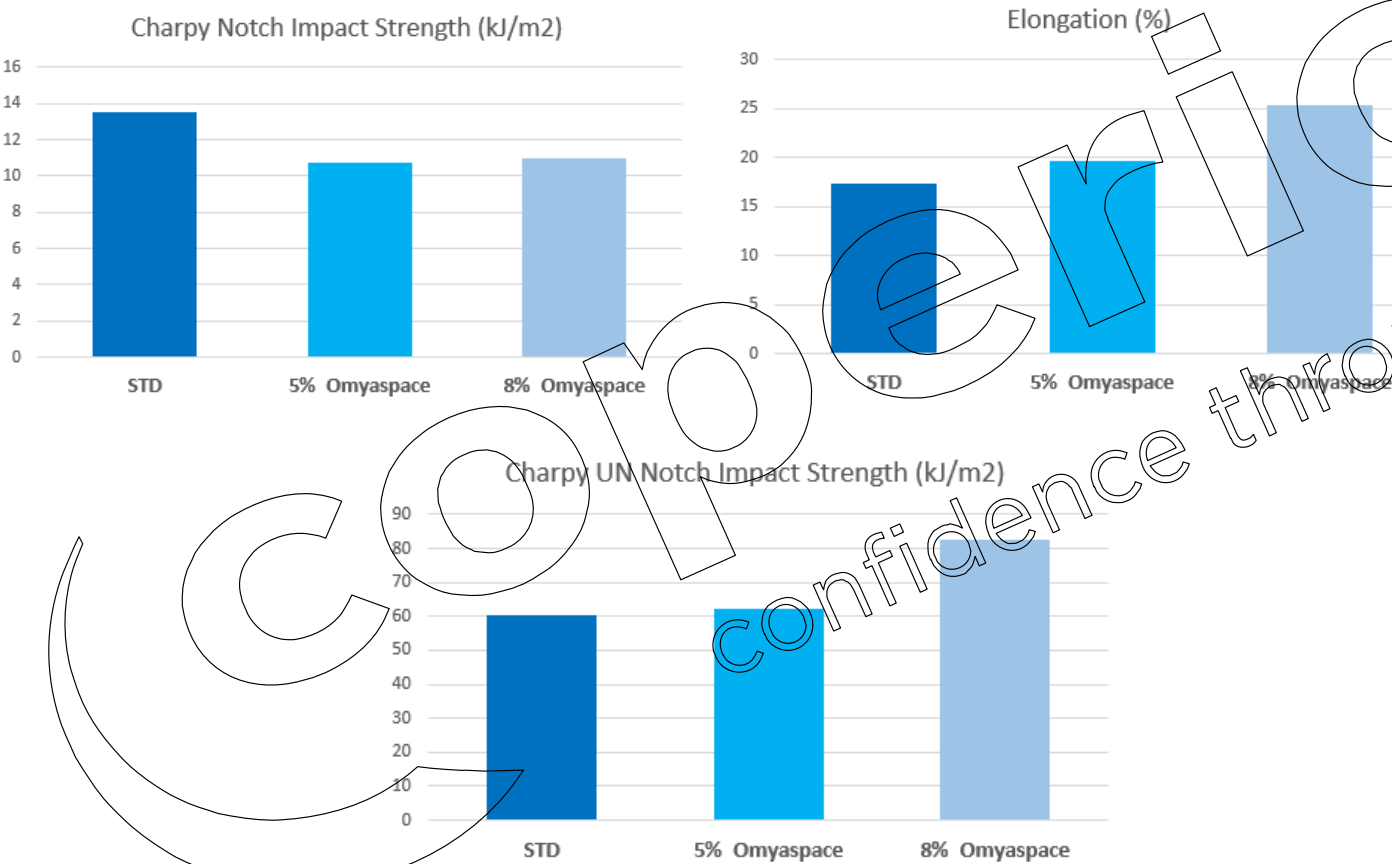


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Omyaspace 806 gave negative impact on tensile strength and modulus, especially at 5% dilution ratio.



Mechanical Properties



“

Addition of
Omyaspace 806
improves
elongation and
unnotched impact
strength



Summary

- Maintain a good level of mechanical properties
- Improves elongation and unnotched impact strength.
- Shrinkage and Density maintained.
- Excellent Surface Scratch Properties
- Cycle time reduction.
- Substantial cost savings.
- Sustainable and renewable raw material.



Omya Smartfill



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Omya Smartfill

Improves engineering polymers
with lower overall costs and
reduced environmental impact



Omya Smartfill

- Natural Calcium Carbonate powder with new generation surface modification.
- More compatible with Polyamide, Polycarbonate and Polyesters
- Some grades (e.g. Omya Smartfill 55-AV) are from 100% recycled source, certified by Buereau Veritas.



Bureau Veritas Certification



Omya Smartfill

Benefits for PA

- *Higher ductility compared to other minerals*
- *Reduced warpage*
- *Improved surface finish in GF compounds*
- *Excellent whiteness*
- *Reduced carbon footprint*

Mineral Modified PA6	Charpy Notched Impact [kJ/m ²]
100% Natural PA6	2.4
PA6 + 30% Omya Smartfill	4.1
PA6 + 30% Talc	3.3
PA6 + 30% Wollastonite	3.1
PA6 + 30% Mica	2.2

Omya Smartfill

Benefits for PC

- *Improved impact strength in white Polycarbonate*
- *Increased stiffness*
- *Excellent whiteness*
- *Lower overall costs*
- *Reduced carbon footprint*
- *Increased recycled content**

*On selected grades

Confidence through partnership

Omyafiber® 800 designed for PP spunmelt and dry-laid nonwovens



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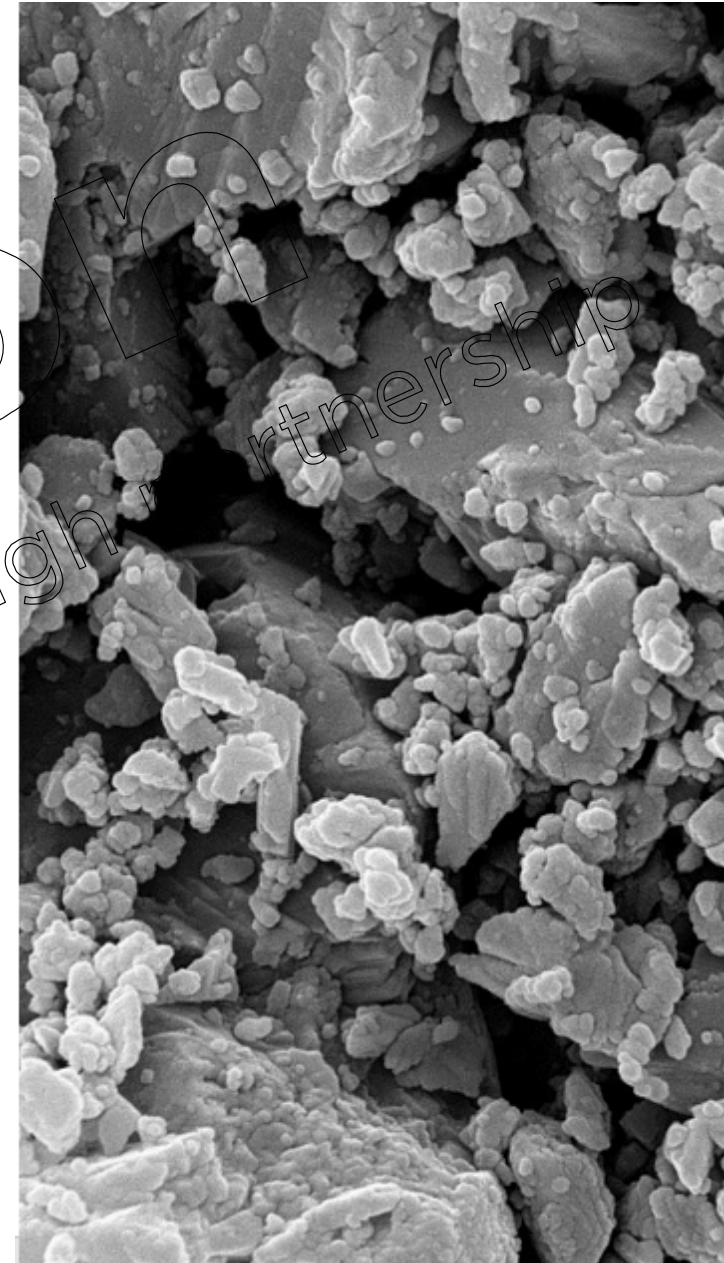
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NEW OMYA PRODUCTS TO ADDRESS CHALLENGES IN COMPOUNDING

Omyafiber® 800: dedicated Calcium Carbonate

- Natural highly pure, fine ground calcium carbonate
- Tailored particle size and particle size distribution
- New improved proprietary surface treatment
- Excellent dispersion properties
- Enhanced processability, optimized compatibility
- Food contact approved

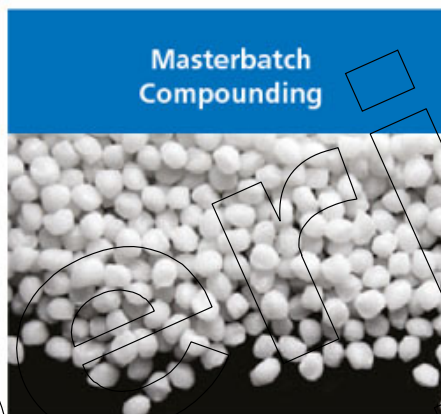


NEW OMYA PRODUCTS TO ADDRESS CHALLENGES IN COMPOUNDING

How to incorporate Omyafiber® 800



100% Omyafiber®



Masterbatch
Compounding

70% Omyafiber®
in PP masterbatch

either:
via staple
fibers &
carding
process

or:
during
spunbond
process



Virgin PP plus
Omyafiber® masterbatch

Typical formulation for spunbond nonwoven fabric	%
Polypropylene, PP homopolymer MFR = 25 - 35 (230°C, 2.16 kg)	84
Color Masterbatch (optional)	2
Omyafiber® 800 Masterbatch (70%) PP based, Filter pressure value (FPV) at 25 µm very low	14

OMYAFIBER®: INNOVATIVE MINERAL MODIFIER

Key benefits for PP nonwoven producers

- Significant Cost Savings
- Natural Cotton-like Softness
- High & Low Grammage Durability
- Enhanced Whiteness & Opacity
- Reduced Static Charge
- Seamless Industrial Processability
- No Die Build-up, No Pressure Changes
- Safe for Food Contact, Skin-Friendly
- Sustainable, Renewable Raw Material



Omyaloo FC



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Omyaloo FC

Certified Recycled Calcium Carbonate
for the Polymer Industry

Recycled Calcium Carbonate for More Sustainable Polymer Products

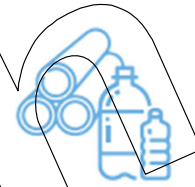
Omyaloop FC

- Highly selected recovered material from other industries that would otherwise be disposed as waste
- Obtained the Bureau Veritas certification as 100% recycled material
- EU 10/2011 food contact certification



Benefits of Omyaloop FC

- 100% recycled content
- ISO 14021 certificate from Bureau Veritas
- Meet EU 10/2011 food contact requirements
- Increases the recycled content of the final product



Rigid



Flexible



Rubbers & Elastomers

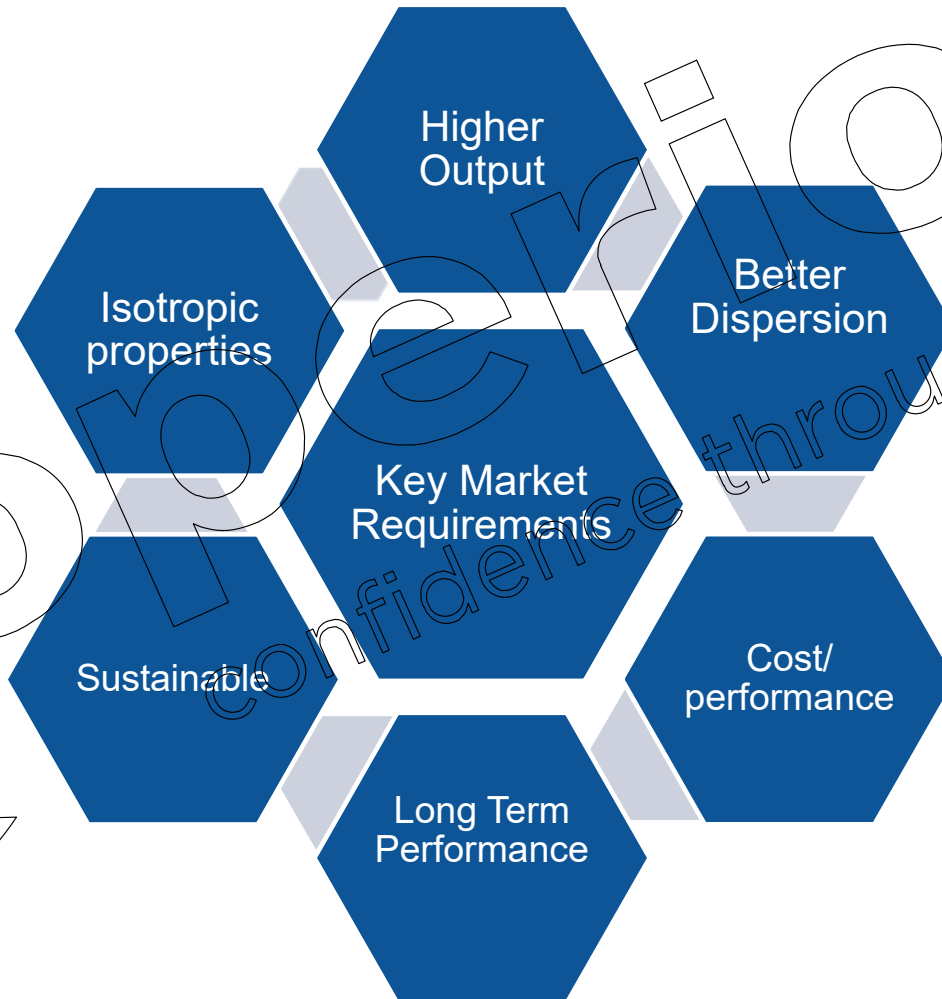


Recycling



Foaming

Key Market Requirements and Omya Solution



Questions & Answers



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There is one more thing.....



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Are you ready to navigate into the circular economy with sustainable

Webinar - Boost recycling content



Developed for the future of the circular economy

Omyaloop FC recycled CaCO_3 [Swipe to know](#)



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Thank you



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