

Taica 株式会社タイカ

Head office
Takanawa Sengakuji-ekimae Bldg. 3F, 2-18-10 Takanawa, Minato-ku, Tokyo 108-0074
Japan
Phone: +81-3-3448-8600 FAX: +81-3-3448-8700

<http://www.taica.co.jp/english/>





aGEL® **The Invention of** **aGEL®**

aGEL® in various fields.





He bought all sorts of gels like tofu, jelly and hundreds of raw eggs.



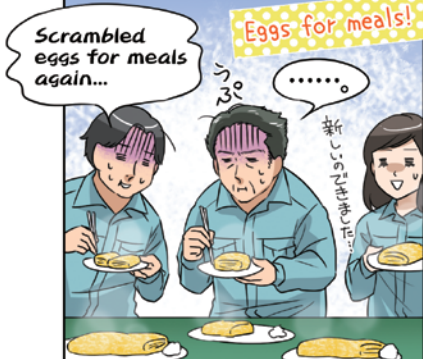
He dropped raw eggs onto the materials over and over again.

Dropping eggs AGAIN?

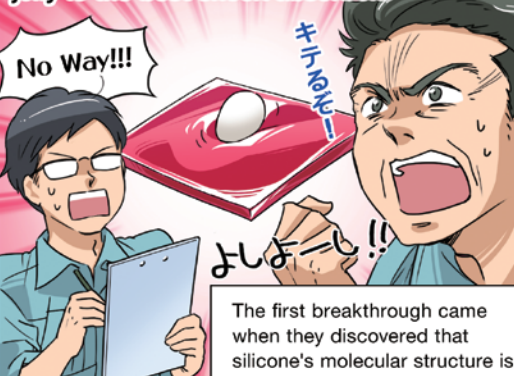


Since we don't have a standard for measurement, we've decided to define a material that doesn't break a raw egg as a good shock absorber.

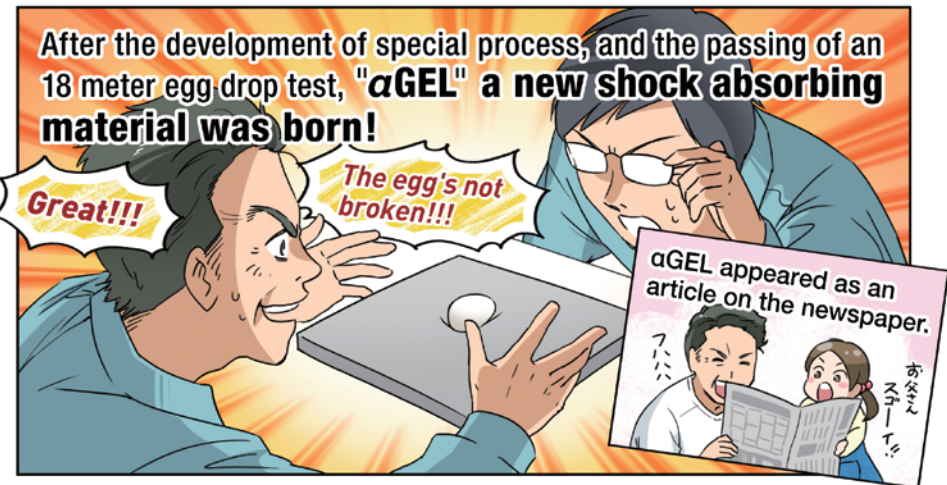
They used **1,000** eggs for this experiment.



Finally they found out that the strawberry jelly is the best shock absorber.



The first breakthrough came when they discovered that silicone's molecular structure is similar to that of jelly.



Then one day, the company got a phone call.



Hi, I am calling from ASICS Corporation.

I would like to know more about αGEL I saw on the newspaper.

Thank you!
How can I help you?

The Egg Drop Test



And so the collaboration between Taica and ASICS began...



But there were many barriers to overcome in order to put αGEL into the sole of a shoe.

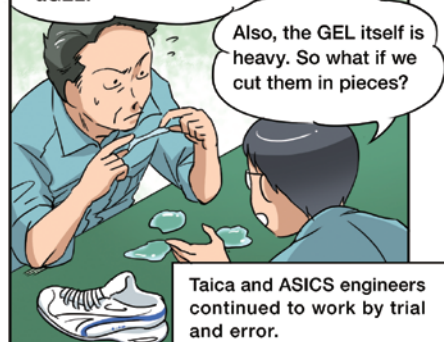
The engineers back then talks about their struggles in development as follows

The GEL was hard to cut and attach because of its tackiness and glueyness.



We were wondering if this jelly-like material would fit into the sole of a shoe.

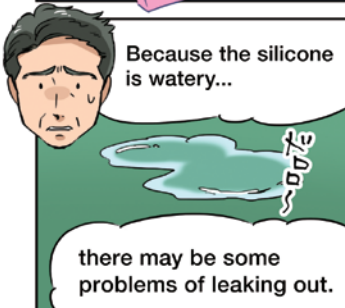
We will need to take the tackiness of the αGEL.



Also, the GEL itself is heavy. So what if we cut them in pieces?

Taica and ASICS engineers continued to work by trial and error.

Because the silicone is watery...



there may be some problems of leaking out.

Time went by and finally...

By using a microwave oven process, they succeeded in wrapping αGEL.



We've made it! The packed GEL will not break and leak even if step them!

And so in 1986, αGEL was chosen for the tread and heel in "FREAKS," the ASICS' flagship model!



The first αGEL equipped shoes, "FREAKS α"

Since then, αGEL has been used in a variety of ASICS shoes for 30 years.

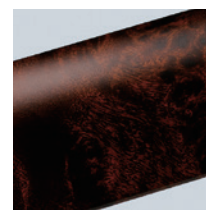
αGEL The Invention of αGEL®

CUBIC PRINTING® The Invention of CUBIC PRINTING®

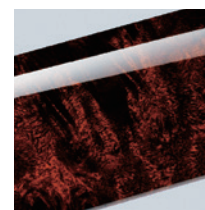
A Global Technology Powerhouse

CUBIC PRINTING®

CUBIC PRINTING®, our pioneering decoration solution for complex surfaces, continues to be popular all over the world.



matte finish



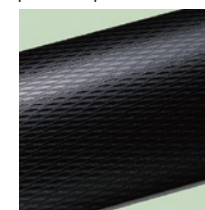
gloss finish

E-CUBIC®

This new, groundbreaking technology makes realistic wood grain and haptic geometric decorations possible. E-CUBIC® is also more environmentally friendly, as it does not require a top coat.



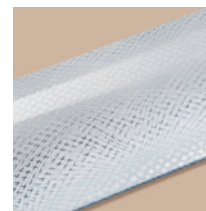
3D appearance



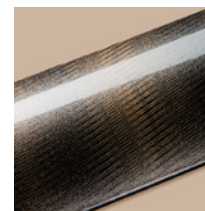
haptic texture

S-CUBIC®

A more realistic, high definition version of the original CUBIC PRINTING®.



Bright silver line elements and white mesh create a sense of depth and motion.



A gun metallic pattern with wavy lines and sparkling pigment.

Applications

CUBIC PRINTING® is suitable for even the most complex shapes and adaptable to any design requirement.

CUBIC PRINTING® has a large variety of applications, from the world's leading auto brands, to consumer electronics, and even furniture. It can be used to decorate many different materials, both hard and soft.



In the early 1970s—

Printing a pattern on a hair dryer, you say...?

Yes, that's right!
Can you do it?

Put the pattern here!
It'll be all the rage.

So you want to print
a pattern on a curved,
plastic surface...?

That sounds pretty difficult...
I'll see what I can do!

At the time, printing directly
onto curved, plastic surfaces
was thought to be impossible.

So the application of adhesive
films was used instead.

There are a lot of
defects in
this product.

Like wrinkles and
incorrect pattern alignment...

Yeah, and this method
costs way too much.

There's got to be another way...

The engineer spent half a year
reading over a thousand patents
on printing technology from
all over the world.

How about
this method...?

How about
that method...?

But no good ideas came to him.
Then one day, he fell ill...

I just need
one good idea...

Darling,
you work
too much!

Ughhh...
my stomach...

This medicine's pretty bitter...
guess I'll wrap it in an *oburāto*.

Whoops!

Oh no!

* In the old days, the Japanese used to wrap powdered medicine in water-soluble starch-based films, called *oburāto*, to make it easier to swallow.

Maybe I can
just fish it out...

What a waste.

スプツツ

Aw, look what
I've done.

ス
ウウ
ウウ

Hm
?!

It's stuck perfectly
onto my finger...
I've got it!
I can use **water
pressure!**

And so **CUBIC PRINTING®**,
the world's first curved surface printing technology, was born!

Inspired by an *oburāto*
sticking to his finger,
the engineer invented
a method of using
water pressure to print
patterns onto objects
with complex shapes.

* When we started, everything was done by hand.

