

GLASSWORKS
— INTERNATIONAL —

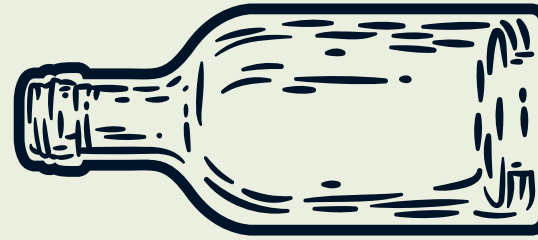
WHY IS OUR GLASS

THE BEST FOR YOU?



WHAT WE DO

GLASS BOTTLES AND JARS



**GLASS IS 100%
AND INFINITELY
RECYCLABLE**



**GLASS IS THE
BEST MATERIAL
TO BE REUSABLE**



**GLASS IS MADE
FROM NATURAL
RAW MATERIALS**



**GLASS PROTECTS PEOPLE HEALTH,
FORMING A COMPLETE BARRIER
AGAINST EXTERNAL AGENTS**



**GLASS IS THE BEST MATERIAL
TO PROTECT FOOD AND
BEVERAGES**

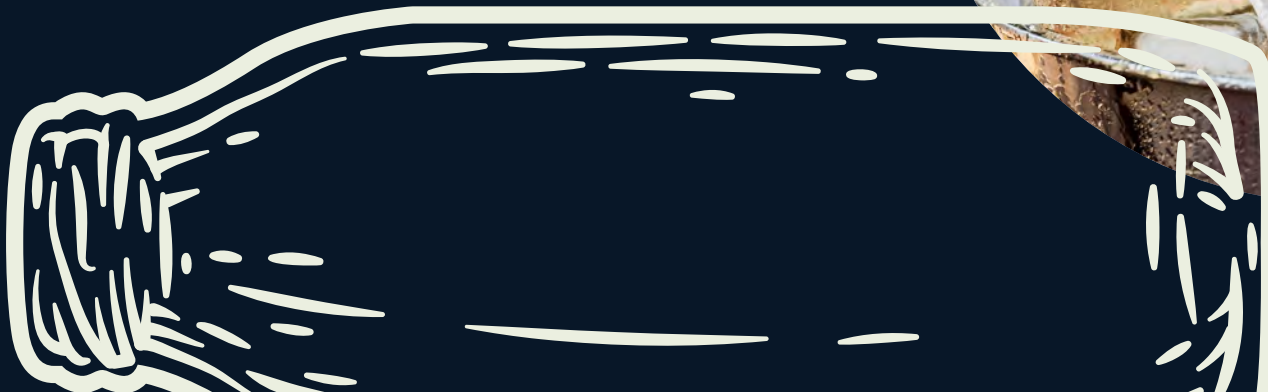
QUALITY & FOOD SAFETY

CUSTOMERS & CONSUMERS CHOOSE GLASS BECAUSE...

**GLASS CONTAINERS HAVE
THE ADVANTAGE OF
PRESERVING THE PRODUCTS**

“When it comes to the best in quality,
purity and performance, glass is the only
material that stands the test of time
Trust a material whose history is over
5,000 years in the making. Trust glass.”

in Friends of Glass



CUSTOMERS & CONSUMERS CHOOSE GLASS BECAUSE...

IT MAINTAINS THE PRODUCT PROPERTIES

“Unlike other materials, glass doesn’t need extra layers or additives to protect the quality or taste of what’s inside with glass, what you see is what you get.”

in Friends of Glass

This characteristic can be proven by the results our suppliers obtains on migration, Mosh Moah and microbiological analysis

IT EXPOSES THE PRODUCT WHILE SIMULTANEOUSLY IMPROVING ITS PRESENTATION

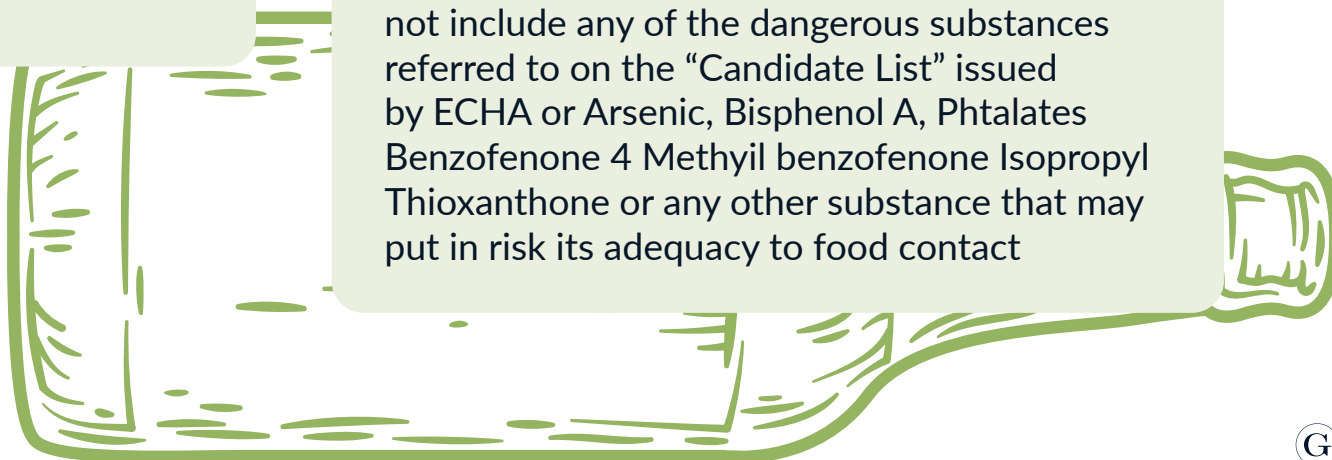
By a different range of colour choices, shapes and engravings

IS FREE FROM DANGEROUS SUBSTANCES

“The only way of making sure that your food is healthy enough for even the smallest member of your family is simple - use glass.”

in Friends of Glass

The glass produced by our suppliers does not include any of the dangerous substances referred to on the “Candidate List” issued by ECHA or Arsenic, Bisphenol A, Phtalates Benzofenone 4 Methyl benzofenone Isopropyl Thioxanthone or any other substance that may put in risk its adequacy to food contact



QUALITY & FOOD SAFETY

THE “SAFE PARTNER”

Glass is the market's choice.

100% INERT

glass is the material
which best protects food

Packaging	Absorbs flavour?	Transfer or loss of flavour?	Access of oxygen of off flavour compounds?	Migration of components from packaging to product?	Loses flavour from light radiation?
GLASS	NO	NO	NO	NO	NO
PET	LIKELY	POSSIBLE	POSSIBLE	LIKELY	POSSIBLE
CARDBOARD AND PAPER	YES	YES	YES	POSSIBLE	NO
CANS	YES	YES	POSSIBLE	YES	NO

Source: Literature report on food packaging materials and their potential impact on food flavor, by Dieter Schrenk MD, PhD
Professor of Food Chemistry and Toxicology Technische Universität Kaiserslautern, Germany. April 2015

SUSTAINABILITY

OUR LONG-TERM COMMITMENT



TO HAVE CO₂
EMISSIONS REDUCED
BY 50% BY 2035

TO BE CARBON
NEUTRAL BY 2050

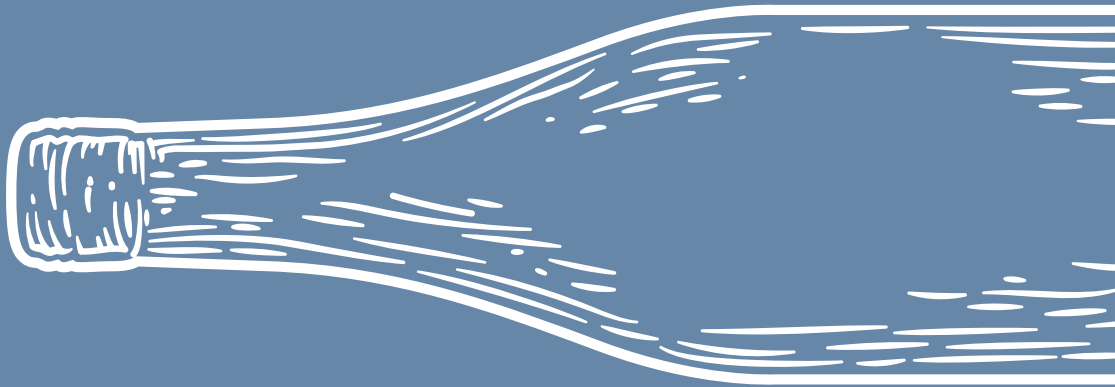


SUSTAINABILITY

OUR ENVIRONMENTAL RESPONSIBILITY

Although, sustainability is one of the trending topics of the moment, for our suppliers, it isn't new.

OUR SUPPLIERS FIRST SUSTAINABLE REPORT WAS LAUNCHED IN 2001.

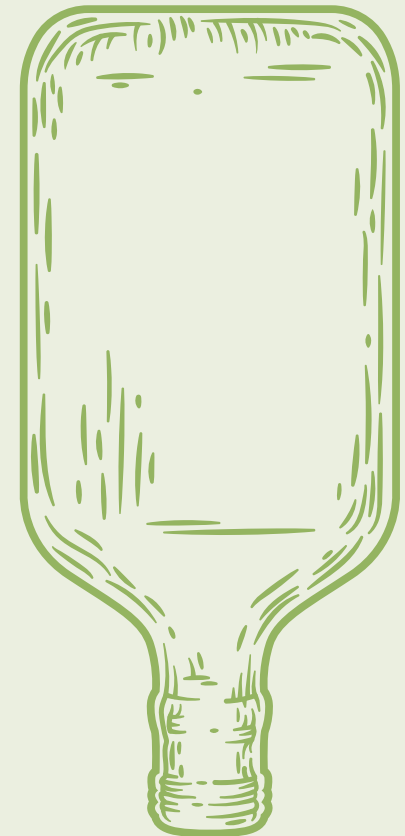


SUSTAINABILITY

OUR MAJOR SUPPLIER IS SCORED BY CARBON DISCLOSURE PROJECT (CDP)

For the third consecutive year, our core supplier has earned an 'A' rating from the Carbon Disclosure Project (CDP Climate), a leading global authority on climate assessment.

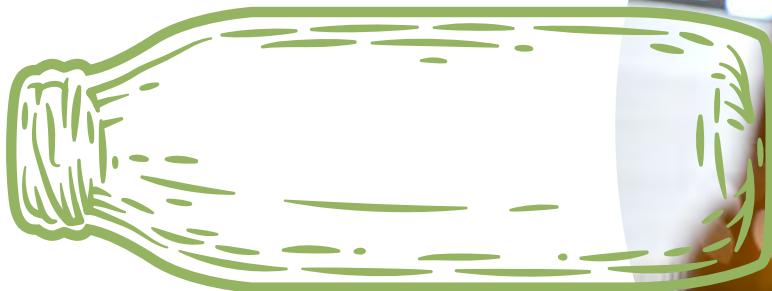
OUT OF MORE THAN 24,000 COMPANIES
EVALUATED, OUR SUPPLIER REMAINS IN AS ONE
OF THE FEW GLASS PACKAGING PRODUCERS TO
ACHIEVE THIS TOP DISTINCTION.



SUSTAINABILITY

MOST SUSTAINABLE COMPANY IN THE GLASS INDUSTRY

Our core supplier has been awarded by an independent institution as the most sustainable company in the Glass Industry for 5 years in a row.



SUSTAINABILITY

WE ARE WORKING WITH OUR SUPPLIERS TO...



REPLACE

To replace the consumption of fossil fuel energy by renewable energy



RENEW

To produce renewable energy for self-consumption



RECYCLE

To increase the volume of recycled glass significantly



SUSTAINABILITY

SCIENCE BASED TARGETS



We are a 1.5 Degree aligned business

REDUCE

Reduction of CO₂ emissions to meet the Paris agreement



OUR COMMITMENT

To work alongside our suppliers with the aim to decrease the CO₂ emissions by 50% in each ton of glass packed, until 2035

ACTIONS TO REDUCE EMISSIONS DURING THE FULL PROCESS



ENERGY EFFICIENCY

Reduction of energy
consumption



FURNACE TECHNOLOGY

Full repairs with
state of art
technologies



RAW MATERIALS

Research alternative
raw materials



CULLET

10% of Cullet = less
2.5% energy
consumption = less
5% CO2 emissions



RENEWABLE ELECTRICITY

Working towards
100% renewable
electricity

100%

HYBRID FURNACE

Furnace operated
with 100%
renewable energy



PACKAGING

Circular Economy
Lower Weight



TRANSPORTS

Optimise routes
and transports with
renewable fuels

RECYCLING

OUR CORE SUPPLIER USES UP TO 70% OF RECYCLING GLASS



-1 TON

waste in nature

-1.2 TONS

virgin raw materials

-2.5%

energy consumption

-5%

C02 emissions

SUSTAINABILITY

USED GLASS BY CORE SUPPLIERS

The main origins of recycled glass (cullet) are:

1

SELECTIVE COLLECTION
OF SPV (PT) AND
ECOVIDRIO (SP)

2

BREAKS IN FILLING LINES
FROM CLIENTS

3

IMPORT MARKETS
(MAINLY EUROPE)





RECYCLING (CULLET)

AS A STRATEGIC PILLAR

On average, each 10% of recycled glass that is used in furnaces saves:

- 2.5% of energy consumption
- 5% of CO2 emissions

On average, cullet:

- is 50%, in coloured glass
- is 25%, in flint glass
- Contribution to CO2 reduction is more than 20%, between flint and colour





ENABLING **SUSTAINABLE PACKAGING AND LOGISTICS**

Possibility to use up to 100% renewable energy transport

MORE THAN 5% LESS
Emissions if we deliver from Marinha Grande

BENEFITS

LIGHTWEIGHT GLASS



LOWER ENVIRONMENTAL IMPACT

Reducing the weight of a glass bottle by just 10% can cut carbon emissions by up to 5% throughout its lifecycle, including manufacturing, transport and recycling.



REDUCED PACKAGING COSTS

Lighter glass means using less raw material. This can lead to cost savings in production and shipping while still preserving the quality and durability your product needs.



IMPROVED SUPPLY EFFICIENCY

Lightweight packaging reduces overall transport weight and improves handling. This makes logistics more efficient. The result is smoother operations, lower emissions and potential cost savings in your supply chain.



SUPPORTS EPR COMPLIANCE

Under EPR, weight is important. Making packaging lighter helps keep it below key thresholds and lowers the fees applied. This gives you a clearer path to compliance.



GLASSWORKS

— INTERNATIONAL —

Thank you for your time.

Please get in touch if you have any queries, we remain at
your full disposal.