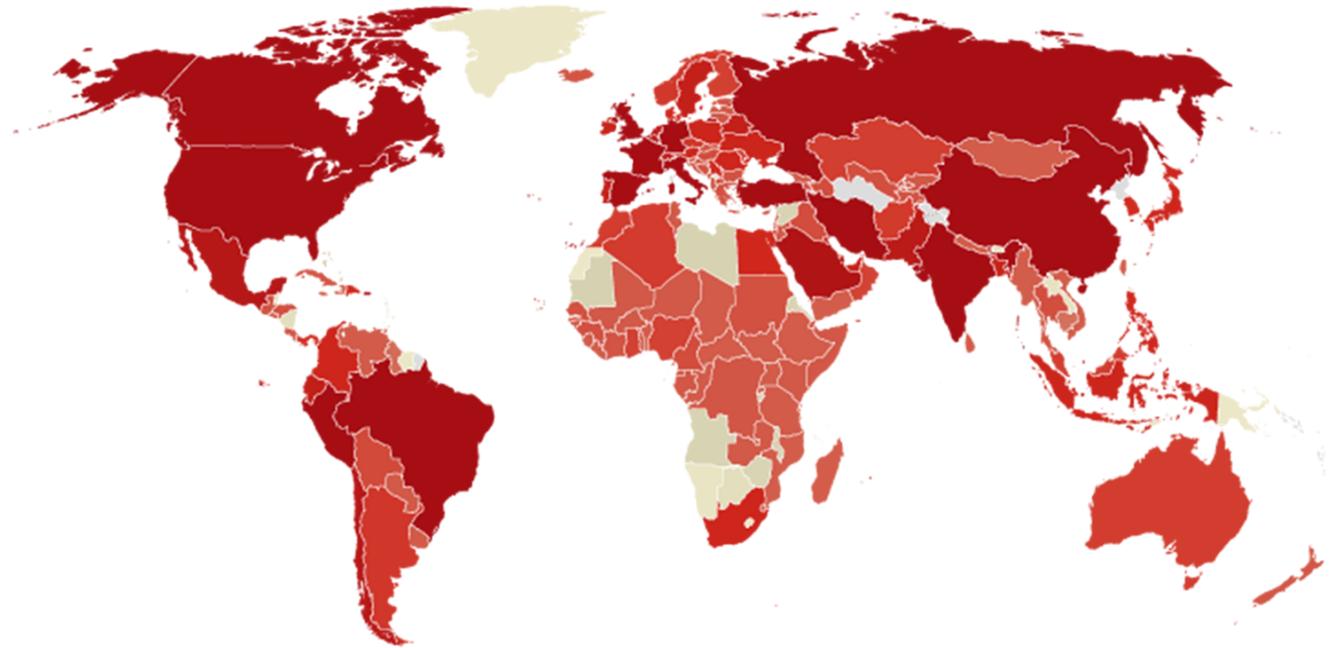




**futrmask**

a sustainable, comfy, accessible mask to everyone

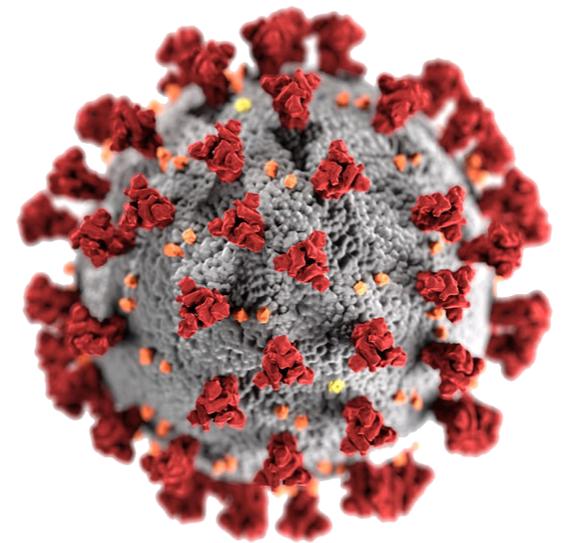
# COVID-19



The rapid propagation of the deadly corona virus has killed millions throughout the world

This has exponentially increased the demand for surgical masks

Masks have been able to flatten the curve and have helped in saving lives



# Issues with Surgical Face Masks

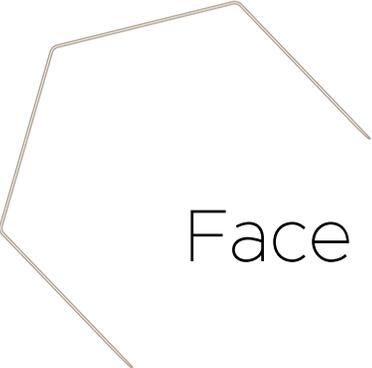
The most common mask people wear are surgical masks even though they are not the most efficient in providing a complete, sealed cover against virus droplets

Surgical masks are not very comfortable and hard to breath in

Many surgical masks are ending in the streets as litter

However, surgical masks are one of the most affordable masks at the moment and are disposable, allowing the user to throw it out rather than having the user go through the hassle of washing and cleaning their mask





# Face Mask SWOT Analysis

## **S** Strengths

Worldwide pandemic: masks are being effective in reducing the spread of COVID 19

Health: provide protection from dangerous airborne particles

## **W** Weaknesses

Environment: most masks are disposable meaning they are not durable and will end up in the trash or as litter in the streets after one use

## **O** Opportunities

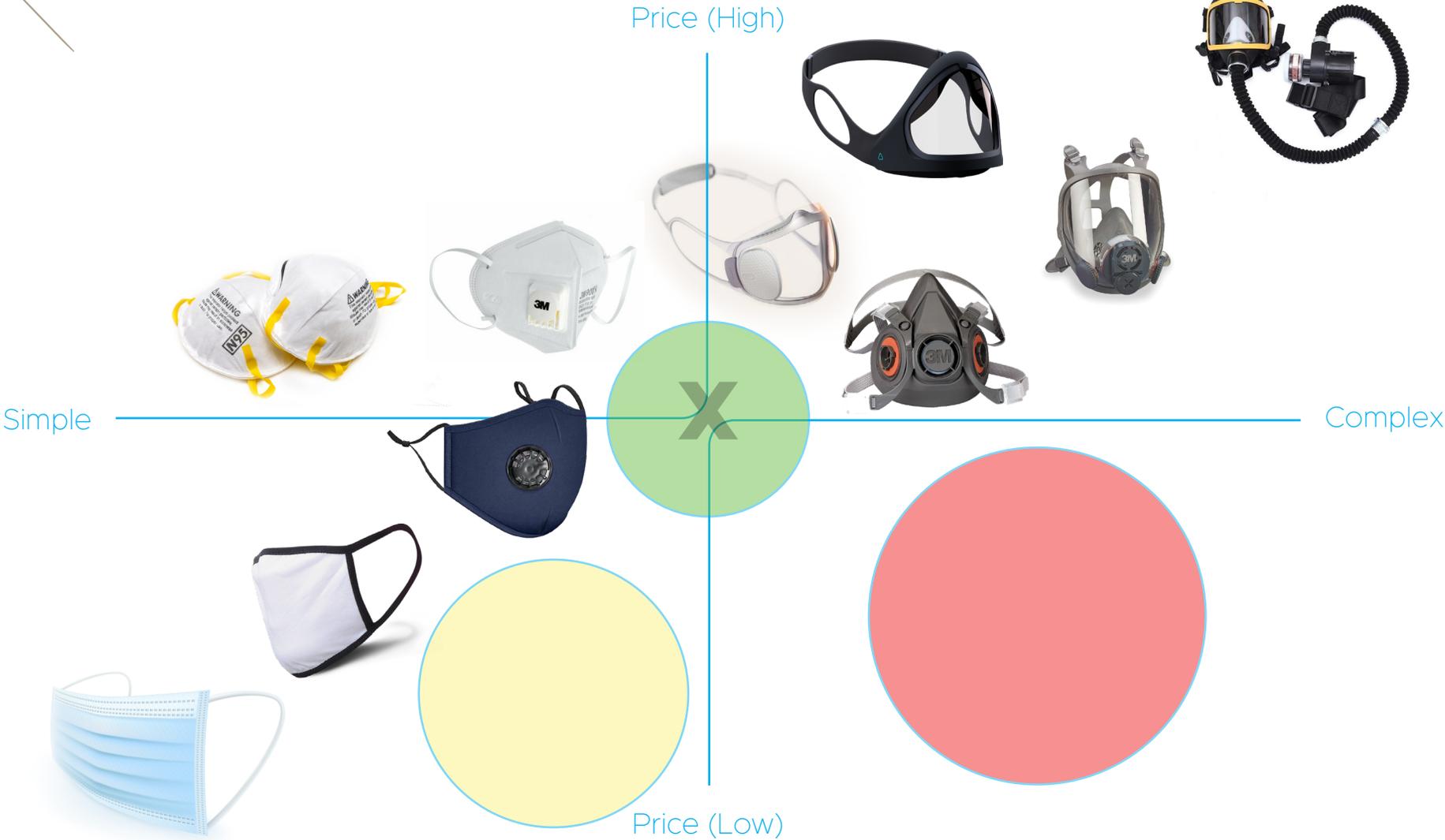
Everyday life: masks are a part of our everyday life, therefore there are opportunities in making durable and user friendly masks

## **T** Threats

Mask use: a new user-friendly mask does not guarantee everyone will want to wear it

Environment: how sustainable will the new mask be

# Opportunity Matrix



# Persona

Young Hispanic couple in their late 20's

Wife works as a teller at a bank

Husband works as an architect

Both love to exercise during the morning together and get a coffee after

They hate having to switch sweaty masks after their run and keep on buying disposable surgical masks for work

They want something at an affordable price range that will protect them from COVID yet allow them to carry on with their daily lives



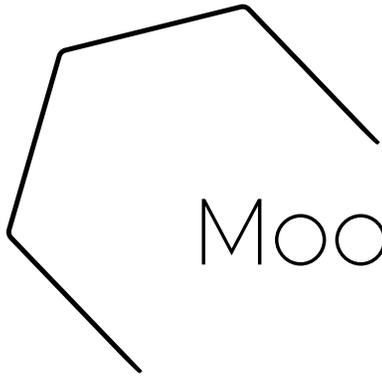
# Current Concepts



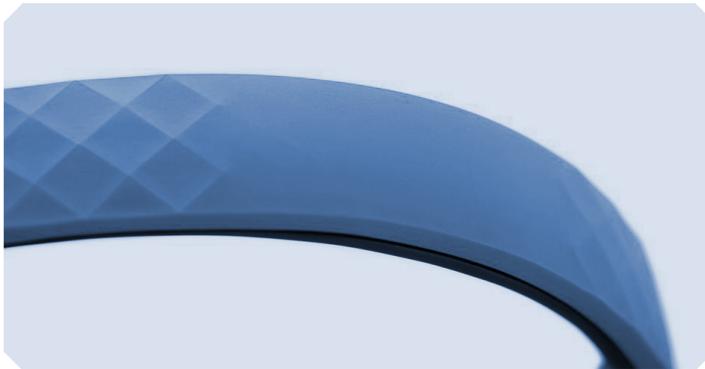
Clear mask concepts  
with replaceable filters

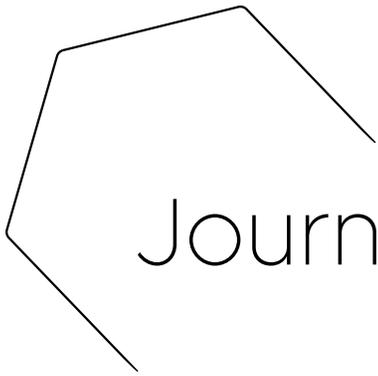
**Leaf**



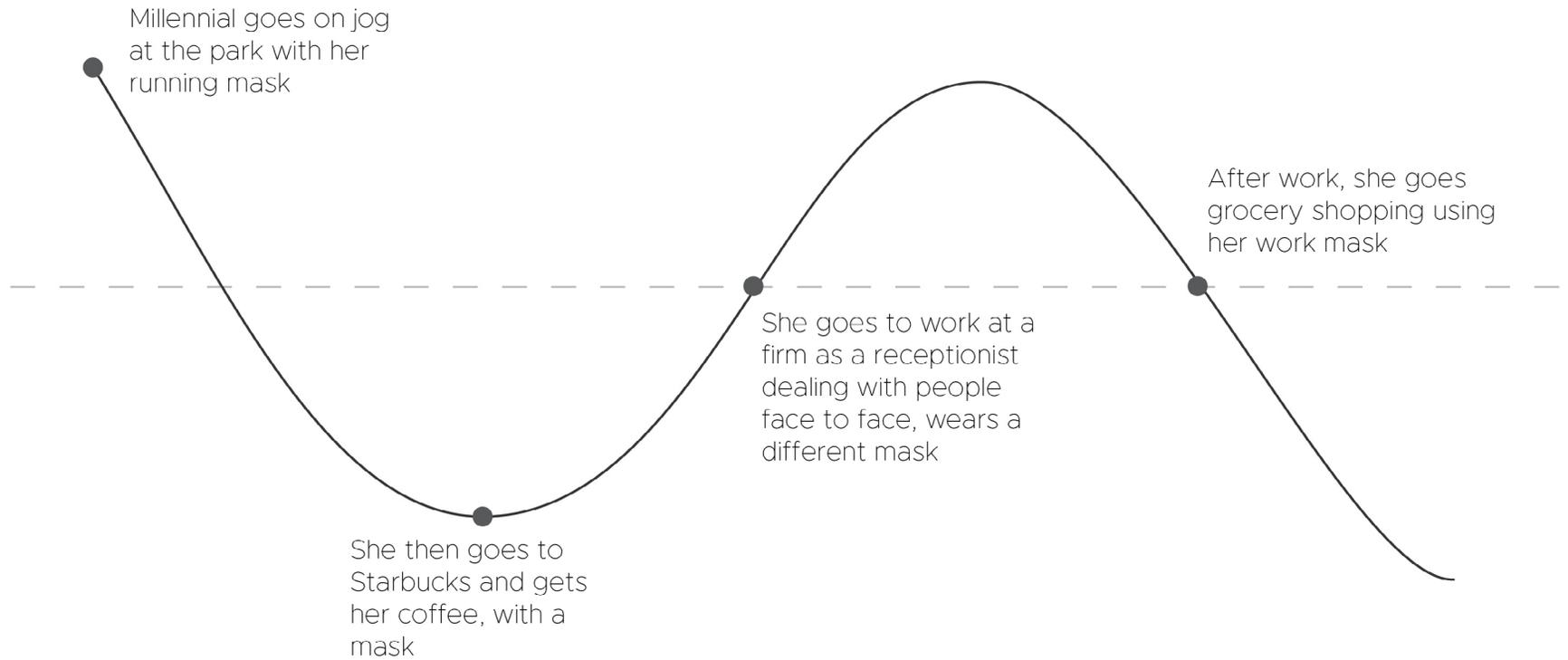


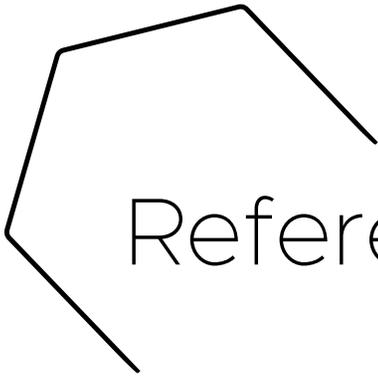
# Mood Board





# Journey Map





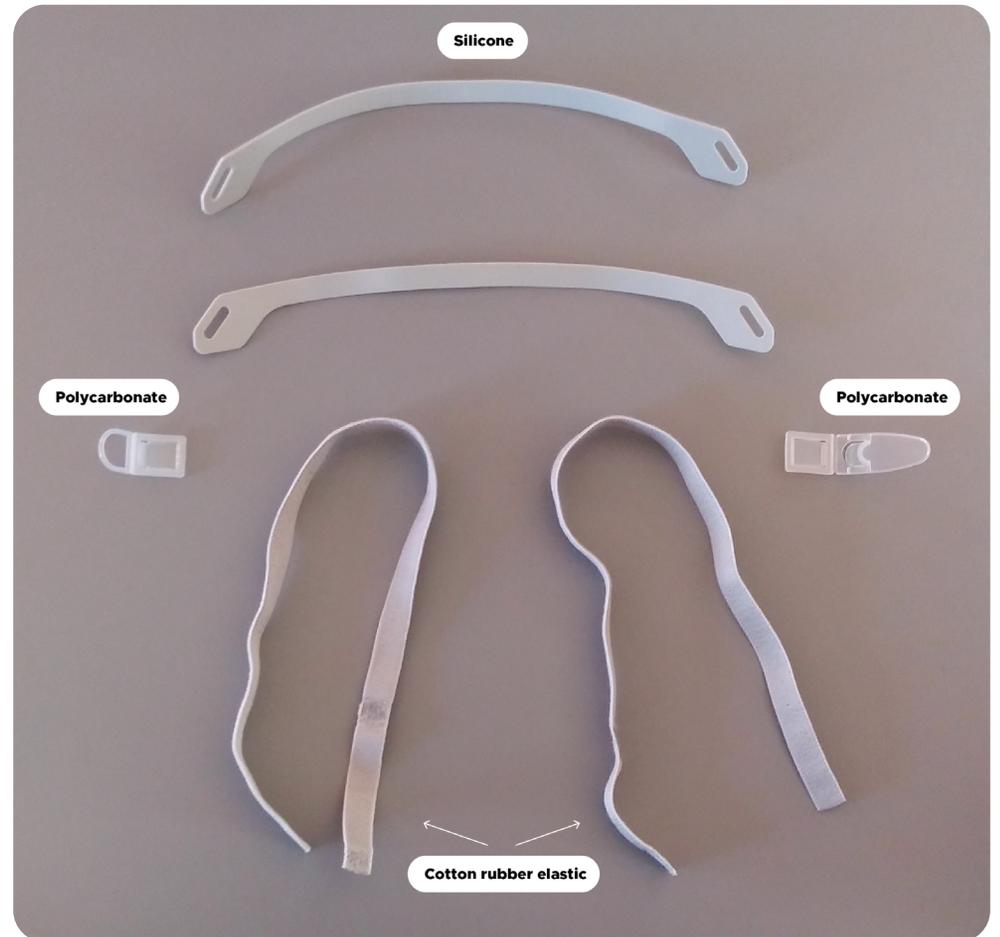
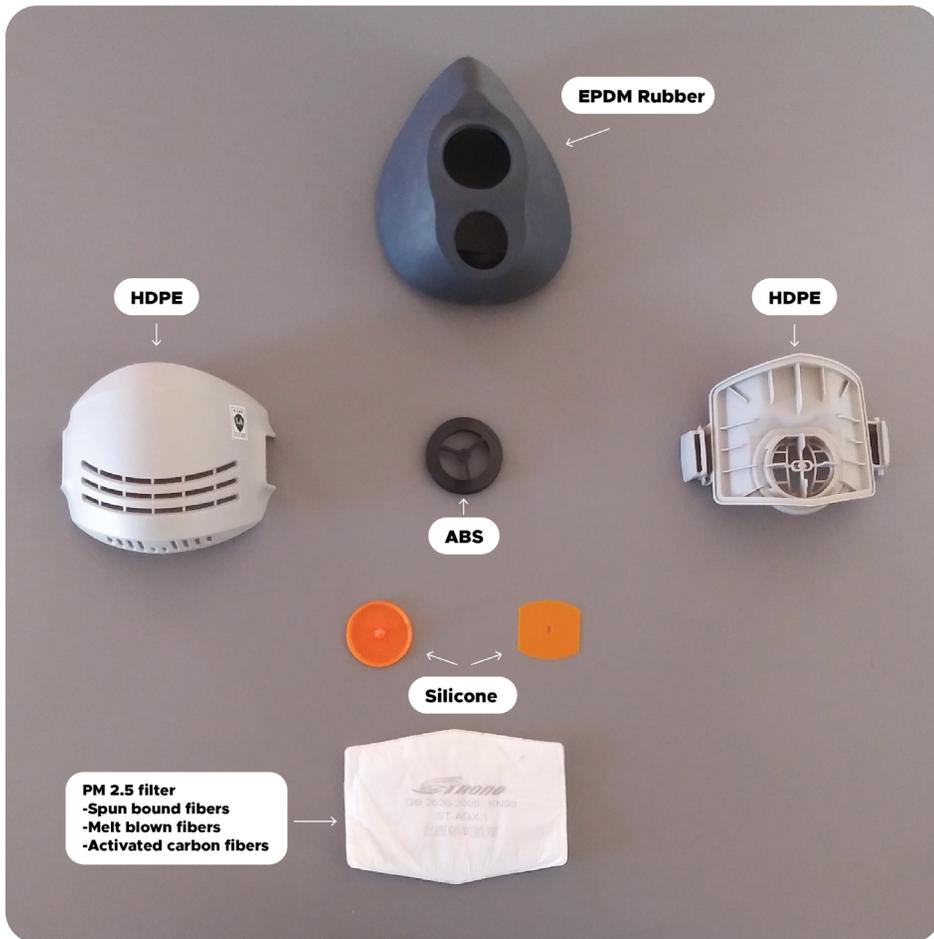
# Reference Object



## Half respirator from Amazon



# Breakdown





# Materials

## **Half Respirator**

HDPE

EPDM

ABS

Silicone

Cotton

## **Packaging**

Paper

LDPE

Bleached Solidboard

## **futrmask**

Polycarbonate, close production

Silicone, closed production

Natural Rubber

Hemp textile

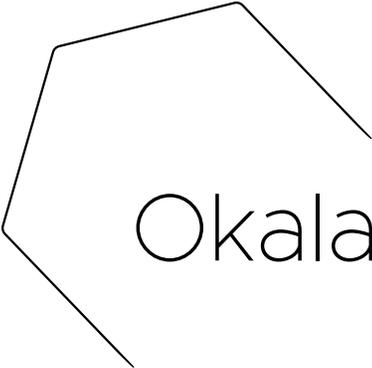
HDPE, closed production

## **Packaging**

Kraft Paper

Bamboo

Trebodur



# Okala Factor Points

Half Respirator

**.000119**

futrmask

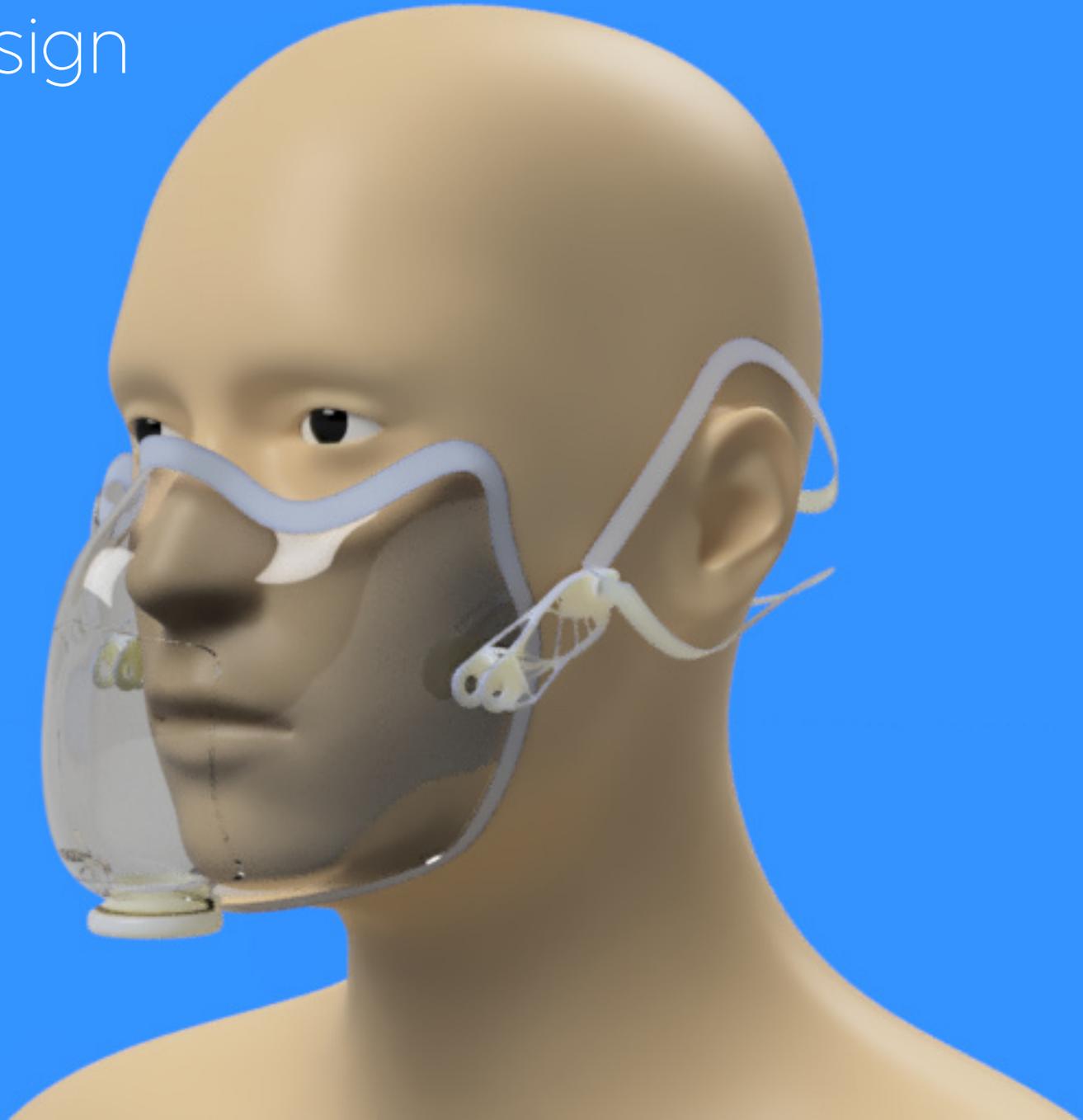
**.0000514**

Both based on a lifetime of 5 years and a total usage of 3000 hours

Same type of transportation: average 16t truck

**Goal**  
**50% reduction**  
**.0000595**

Final Design

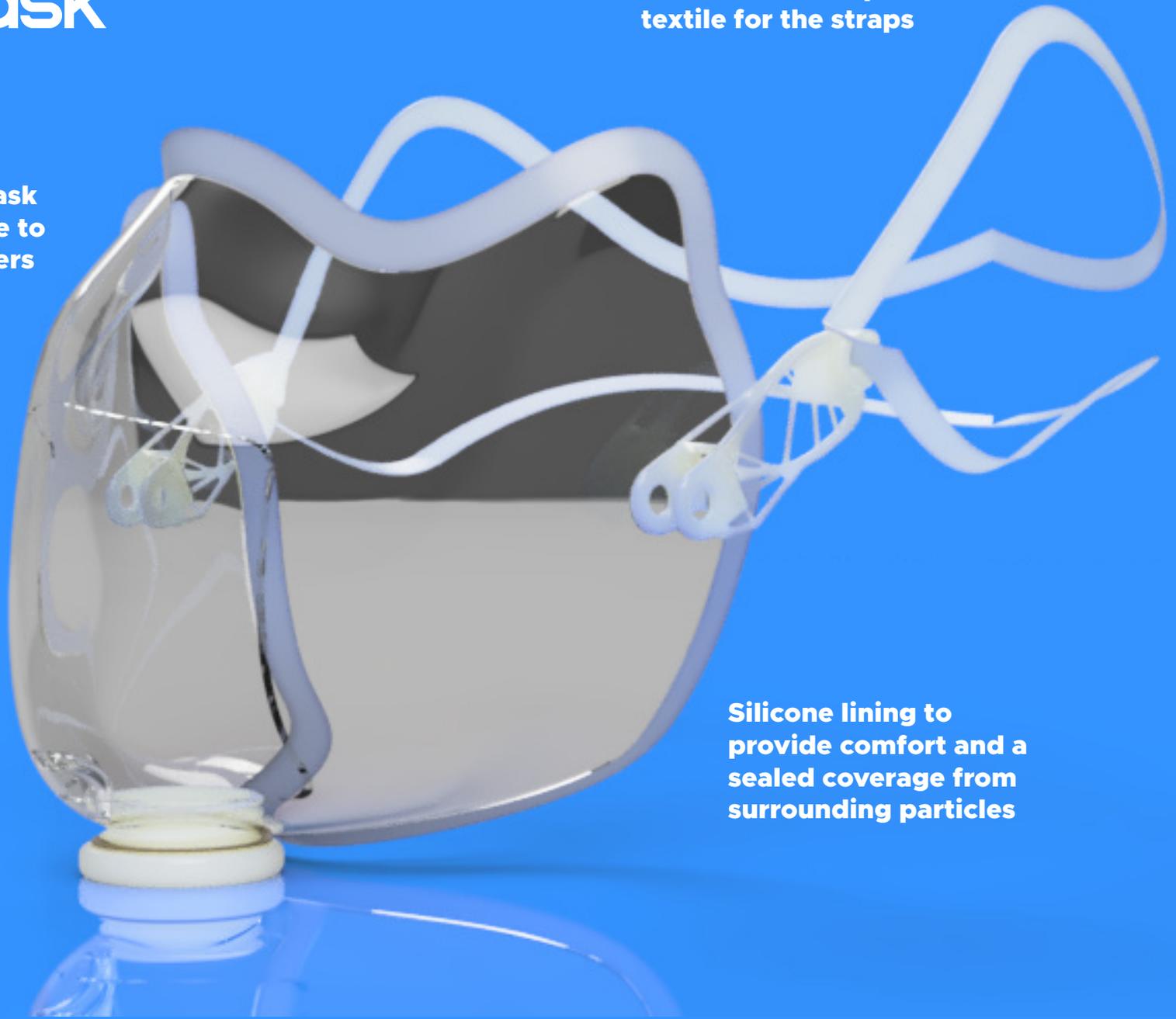




**futrmask**

**Sustainable hemp  
textile for the straps**

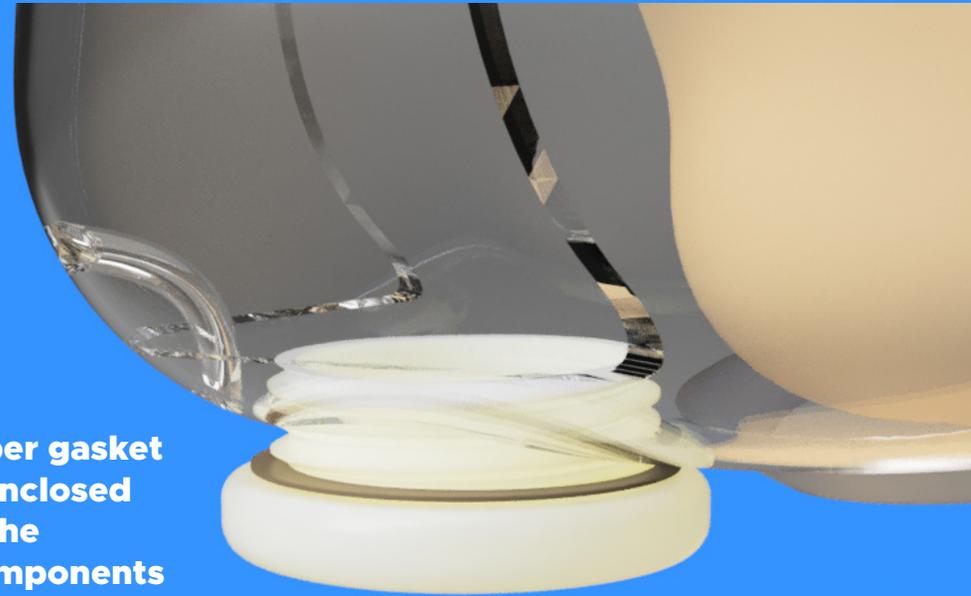
**Coated clear  
polycarbonate mask  
that allows people to  
observe each others  
emotions without  
fogging up**



**Silicone lining to  
provide comfort and a  
sealed coverage from  
surrounding particles**

# Details

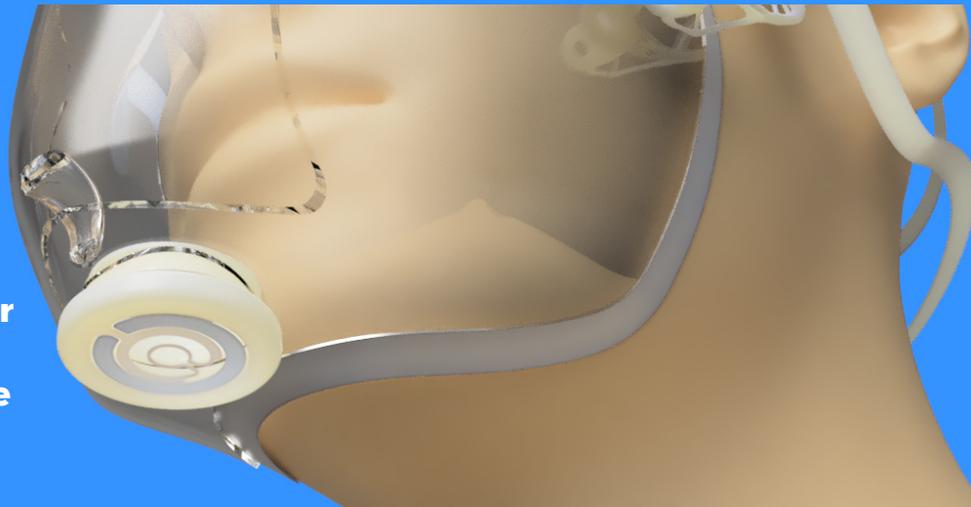
**Natural rubber gasket ensures an enclosed area where the threaded components meet**



**Bamboo fleece and N95 filters are housed in the compartment**

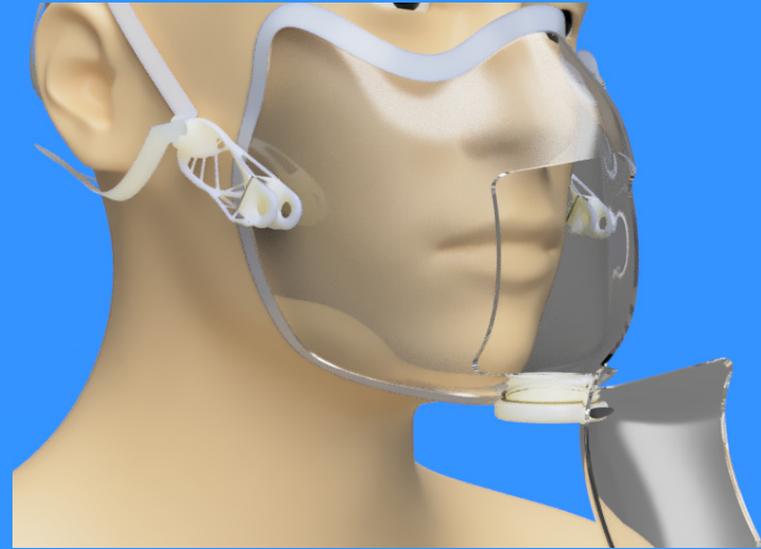


**Threaded HDPE filter housing connected to the polycarbonate mask mold**

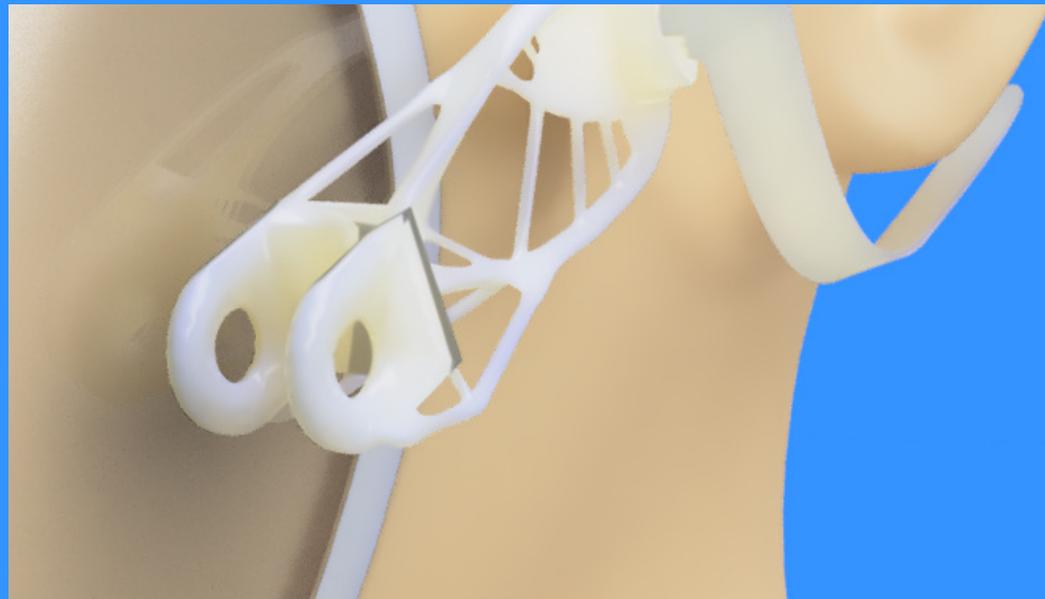


# Details

**A silicone flap attached to a separate piece of polycarbonate allows the user to open up the mask to eat or drink without removing the entire mask**



**A rubber lattice structure is attached through a hole in the mask and provides extra flexibility for the straps**



# Packaging

**Bamboo pulp box encloses all packing material, mask, and components**



**Cylindrical bamboo case for mask storage**



**Trebodur used as packing material enclosing the mask, bamboo case, and components**





thank you

futrmask