

CHEMISTRY THAT MATTERS™



# 360° POLYMERE UND COMPOUNDS VON SABIC, DIE JEDEM ELEMENT GERECHT WERDEN

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September 2019



DIE 4 ELEMENTE

THE 4 ELEMENTS



Earth, Water, Air, Fire

and ULTEM™ Resin or EXTEM™ Resin covering all....

## WHAT IS ULTEM™ RESIN ?

ULTEM™  
resins

Amorphous, transparent, amber, polyetherimide (PEI) resin.

- Long-term high heat capability
- Dimensional stability / Tight tolerances
- Strength and modulus at high temperatures (Tg at 217°C)
- Inherent flame resistance
- Low smoke evolution and toxicity
- Hydrolytic and chemical stability

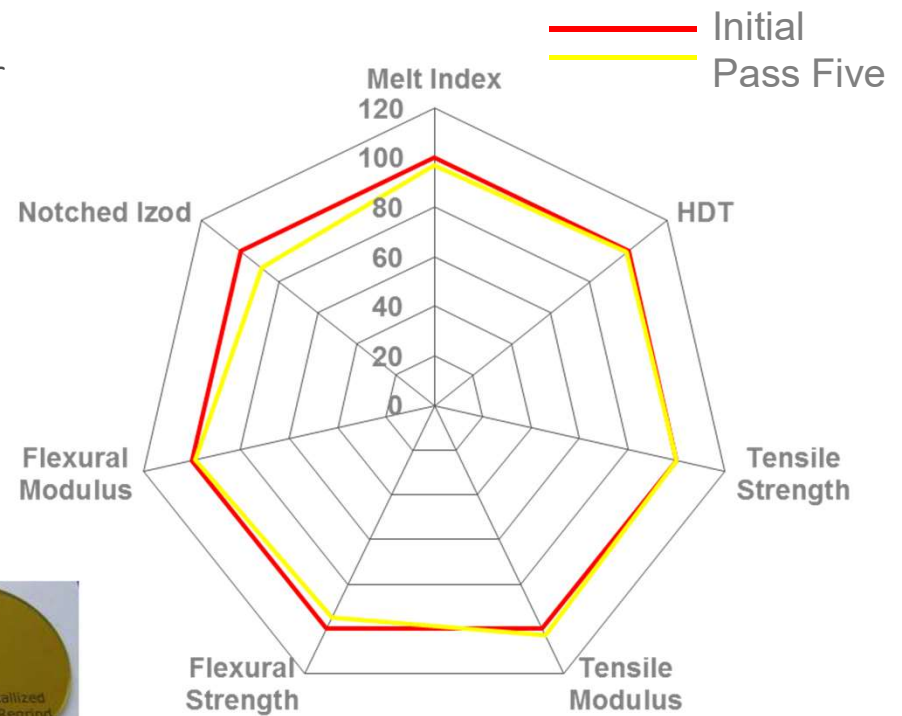
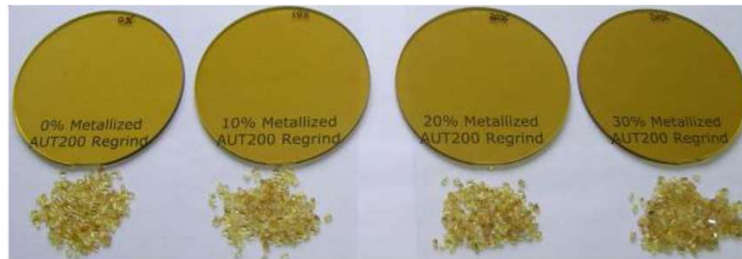


# ERDE EARTH RECYCLE STUDY ULTEM™ RESIN



Zero Scrap Process:  
another bright way to work greener

Industrial recycled  
ULTEM™ RESIN available  
(including UL listing!)



5 Pass Recycle Studies ULTEM 1010 Resin  
20% Regrind X 5 passes after metallization

## WASSER WATER



### “ INDUSTRY NEEDS:

- High quality with high aesthetics
- Convenience of use and maintenance
- Increased need for connected devices
- Health focus
- Sustainability



### WHAT CAN ULTEM™ RESIN OFFER?

Value Propositions	Potential Benefits	Portfolio Suggestions
<ul style="list-style-type: none"><li>• High heat and creep resistance</li><li>• Dimensional stability, low CTE</li><li>• Humidity, chemical and stain resistance</li><li>• High stiffness and strength to weight ratio</li><li>• Colorability</li><li>• Regulatory approvals food/water (e.g. FDA)</li><li>• Resilience</li></ul>	<ul style="list-style-type: none"><li>• High aesthetics</li><li>• Long life cycle</li><li>• Light weight</li></ul>	<ul style="list-style-type: none"><li>• ULTEM™ 1000 series</li><li>• ULTEM™ 2000 series</li><li>• ULTEM™ PW resin</li><li>• ULTEM™ CRS series</li><li>• EXTEM™ XH1015 resin</li></ul>

# LUFT AIR ULTEM™ RESIN IN AEROSPACE APPLICATIONS



## “ INDUSTRY NEEDS:

- Passenger safety
- Weight reduction and fuel economy
- Comfort and aesthetics
- Ease of installation and maintenance
- Space optimization
- Sustainability



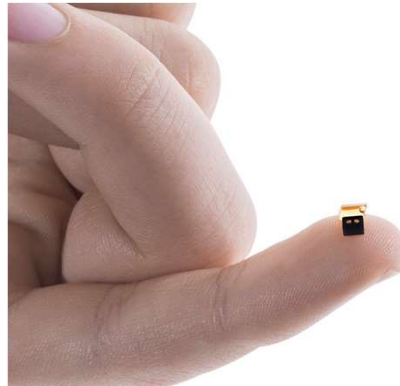
## WHAT CAN WE OFFER?

Value Propositions	Potential Benefits	Portfolio Suggestions
<ul style="list-style-type: none"><li>• Inherent FR, meeting FAR and OSU regulatory requirements</li><li>• Light weight (compared to metals + some competitive offerings)</li><li>• High strength / stiffness to weight ratio</li><li>• Lot-to-lot certification</li><li>• Custom color capability</li></ul>	<ul style="list-style-type: none"><li>• Weight and cost reduction</li><li>• Part consolidation and integration</li><li>• Multiple forms offering</li></ul>	<ul style="list-style-type: none"><li>• ULTEM™ 1000 series</li><li>• ULTEM™ 2000 series</li><li>• ULTEM™ 9000 resin</li><li>• ULTEM™ CRS series</li><li>• ULTEM™ Foam, Filament, Fiber and Sheet</li></ul>

FEUER

FIRE

ULTEM™ RESIN: INHERENT FLAME RESISTANCE, UL LISTED



Source: SOPROD S.A.

## WHAT CAN WE OFFER?

### Value Propositions

- High heat and creep resistance
- Dimensional stability, low CTE
- Humidity and chemical resistance
- High stiffness and strength to weight ratio
- UL94 V0/5VA, RoHS compliant
- Low outgassing, low ionics
- Stable DC and low loss factor
- Plateability

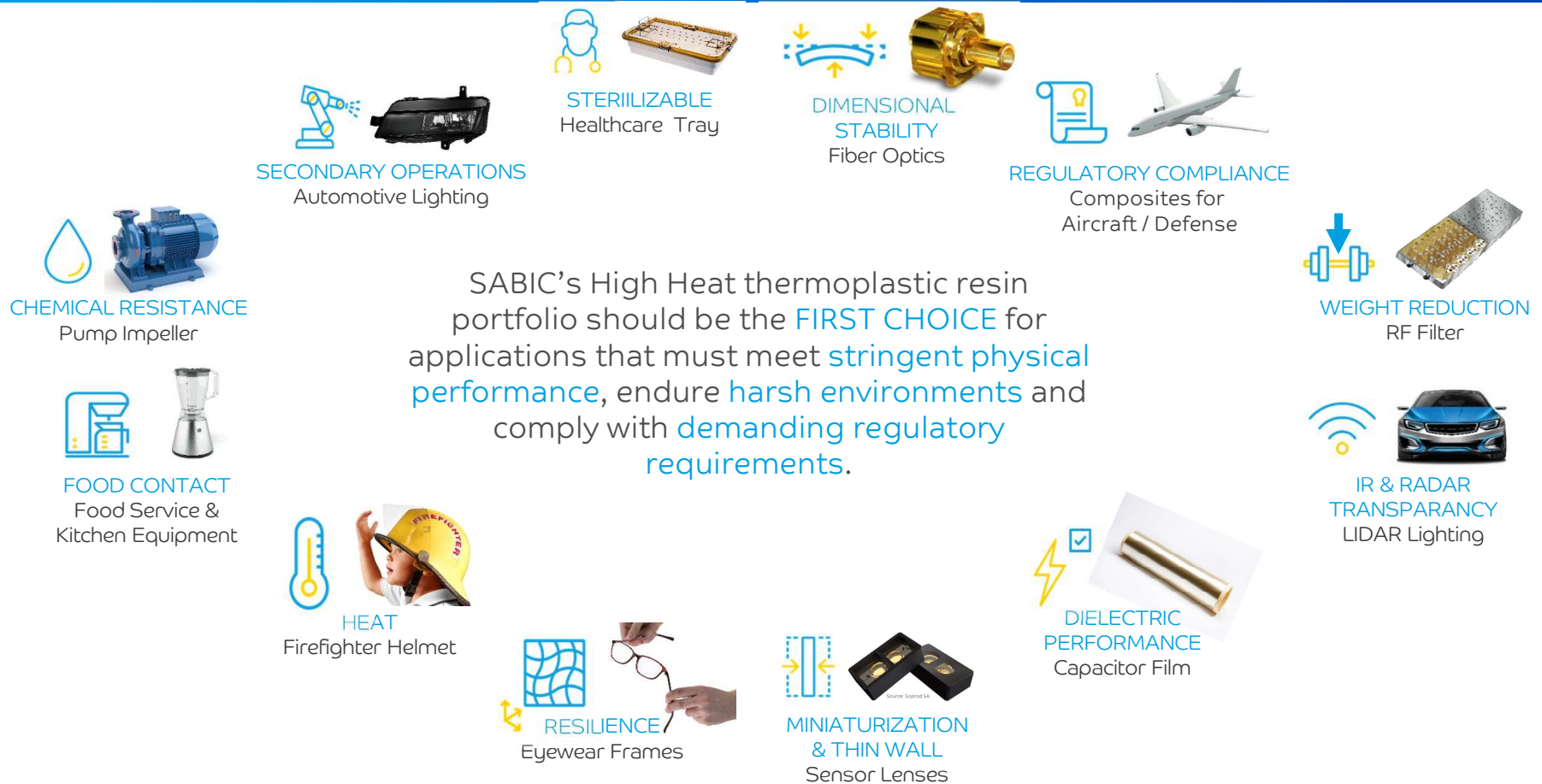
### Potential Benefits

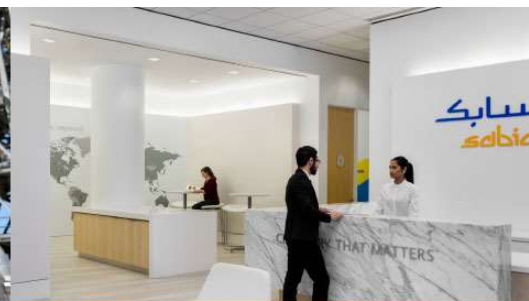
- Weight and cost reduction
- Part consolidation
- Injection moldable
- Capability for thin wall and miniaturized designs

### Portfolio Suggestions

ULTEM™ 1000 series  
ULTEM™ 2000 series  
ULTEM™ 3452 resin  
ULTEM™ CRS series  
ULTEM™ UTF120 film  
EXTEM™ XH1015 resin  
SILTEM™ STM series

## 4 ELEMENTS ULTEM™ RESIN COVERS IT ALL





THANK YOU

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