

# HEALTHCARE



## SABIC SOLUTIONS FOR HYGIENE AND HEALTHCARE INDUSTRY

SABIC is at the forefront of the industry, providing innovative materials and processing expertise to support our customers in the hygiene and healthcare industries. We understand the importance of addressing the changing requirements in these industries, and we are committed to meeting the growing demand for reliable and safe materials solutions.

As the elderly population continues to grow and chronic diseases are on the rise, the need for innovative healthcare applications is greater than ever. Additionally, emerging economies are experiencing easier access to healthcare, which further emphasizes the need for reliable materials for portable technologies and the reduction of healthcare associated infections. SABIC is dedicated to meeting these challenges and ensuring that our materials meet the increased regulations for medical devices and pharmaceutical products.

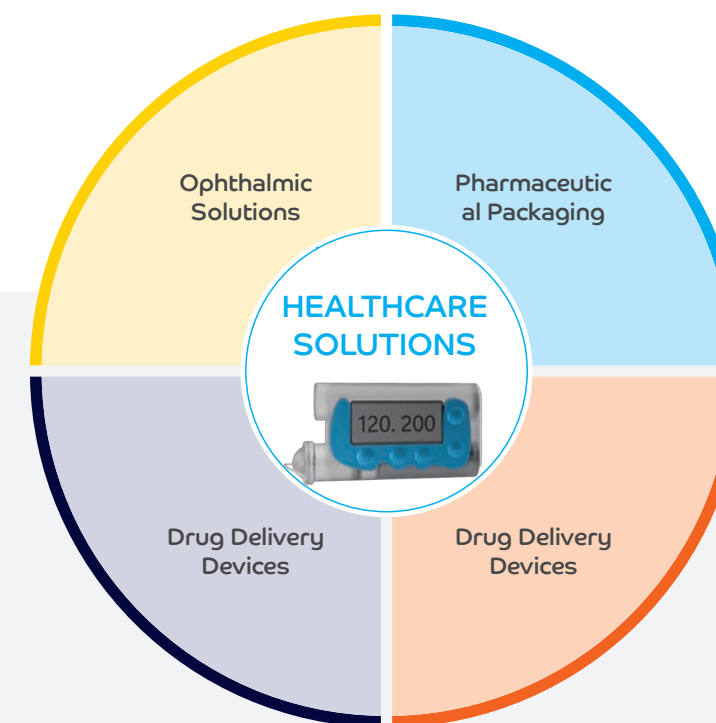
Our broad healthcare materials portfolio spans full product line from polyolefins to high performance plastics including, LEXAN™ HP (PC) resin, CYCOLAC™ HMG (ABS), VALOX™ HX (PBT), SABIC® PCG PP resin and SABIC® PE, as well as a variety of compounds. These materials are produced under good manufacturing practice (GMP) to meet stringent requirements of healthcare industry.

SABIC PURECARES™ solutions for hygiene and medical nonwoven applications address top market drivers in the hygiene and healthcare industry. PURECARES™ is a combination of two words "pureness" and "care", offering safe and clean solutions for patients and consumers.

SABIC's TRUCIRCLE™ program offers a solution to recycle plastic waste generated by the healthcare and hygiene industry.

### HEALTHCARE SOLUTIONS

- Pharmaceutical Packaging
- Drug Delivery Devices
- Diagnostics Solutions
- Ophthalmic Solutions



### HYGIENE SOLUTIONS

- Baby, adult & feminine hygiene
- Medical disposable surgical gowns and facemasks
- Wound absorption



## EMI Shielding Solution for Electrosurgical Generator Housing

### LNPT™ FARADDEX™ Compounds



#### SOLUTION SUMMARY

- Shields electromagnetic interference which affects equipment performance
- Eliminates copper-plating process, resulting in higher yields and lower costs
- Colorable to cater to various models
- Each part weighs ~1kg

#### VALUE PROPOSITION



- EMI shielding
- Lightweight vs. metal
- Easy processing
- Colorable



## Lubricated Solutions for Insulin Pen Precision Parts

### LNPT™ LUBRICOMP™ Compounds



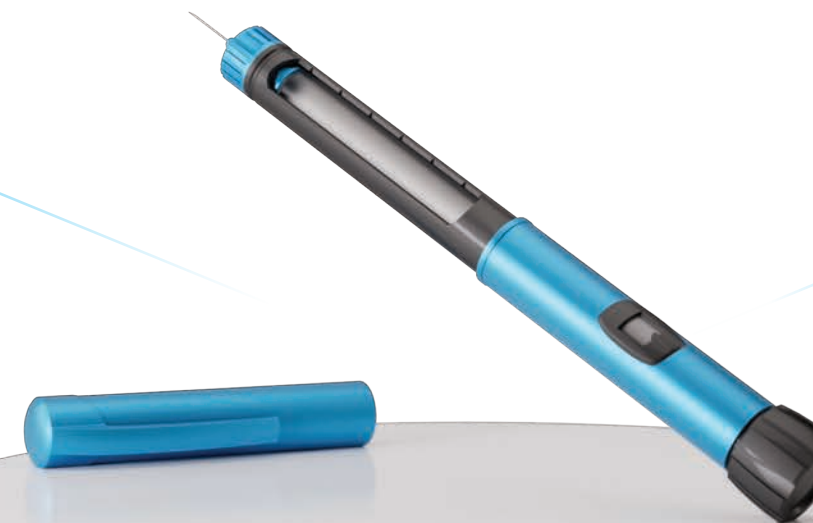
#### SOLUTION SUMMARY

- Formulation lock, as required, by many healthcare applications
- Low friction for smooth and quiet use and dimensional stability for accurate dosing
- Good chemical and impact resistance
- Each part weighs <100 grams

#### VALUE PROPOSITION



- High stiffness
- Low wear and friction
- Chemical resistance
- Healthcare grade with formulation lock



## Lubricated Solution for Insulin Pen Rotary Lock

### LNP™ LUBRICOMP™ Compounds



#### SOLUTION SUMMARY

- Formulation lock to meet relevant healthcare standards
- Low wear and friction, enabling smooth operation
- High-strength material needed for a rotary lock to prevent breakages
- Each part weighs <100 grams

#### VALUE PROPOSITION



- Chemical resistance
- Low wear and friction
- Good mechanical properties
- Healthcare grade with formulation lock



## Healthcare Sterilization Tray

### NORYL™ Resin



#### SOLUTION SUMMARY

- Durability after repeated autoclave sterilization due to heat resistance
- Can be easily processed to fill intricate tray parts
- Formulation lock to meet relevant healthcare standards
- Each part weighs ~1 kg

#### VALUE PROPOSITION



- Chemical resistance
- Heat resistance
- Easy processing
- Healthcare



## Flame Resistant Solution for Medical Hearing Aid Parts

### LNPT™ THERMOCOMP™ Compounds



#### SOLUTION SUMMARY

- Good impact strength that has passed drop tests, with resistance to cleaning chemicals
- Flame resistance due to chargeable batteries
- Formulation lock to meet relevant healthcare standards
- Each part weighs <100 grams

#### VALUE PROPOSITION



- Chemical resistance
- Impact resistance
- ECO flame retardant
- Easy processing



## Structural Solution for Surgical Stapler Parts

### LNPT™ THERMOCOMP™ Compounds



#### SOLUTION SUMMARY

- High stiffness for a wide variety of structural applications
- Locked formulation per healthcare requirements
- Good dimensional stability, easy flow for molding of long parts and sterilizable
- Each part weighs <100 grams

#### VALUE PROPOSITION



- High stiffness
- Dimensional stability
- Healthcare grade with formulation lock
- Easy processing



## Non-PFAS Solution for Healthcare Continuous Glucose Monitor

### LNP™ LUBRILOY™ Compounds



#### SOLUTION SUMMARY

- Offers non-PFAS (group of restricted chemicals) solutions
- Provides dimensional stability and reduced wear and friction for moving parts
- Formulation is locked per certain healthcare requirements
- Each part weighs <100 grams

#### VALUE PROPOSITION



- Wear resistance
- Dimensional stability
- Healthcare
- Easy processing



## Chemical Resistance Solution for Medical Equipment Monitor Housing

### LNP™ ELCRES™ Resin



#### SOLUTION SUMMARY

- Offers improved chemical resistance to the more aggressive disinfectants and testing reagents used today in healthcare settings
- Offers flame resistance, good impact strength, colorable and good dimensional stability
- Each part weighs ~ 1kg

#### VALUE PROPOSITION



- Excellent chemical resistance
- Impact resistance
- Dimensional stability
- Flame retardant



## Hospital Bed Frame

SABIC® HDPE BM1052 Polyethylene & SABIC® MG94 Resin



### SOLUTION SUMMARY

- Good material strength and rigidity
- Excellent chemical resistance
- Can contribute to preventing hospital-acquired infections
- SABIC material share of this application is 100%

### VALUE PROPOSITION



- Regulatory Compliance
- Chemical Resistance
- Impact Strength



## Healthcare Blow-fill Seal Interavenous Bottles

SABIC® PCG06 Low Density Polyethylene (LDPE)



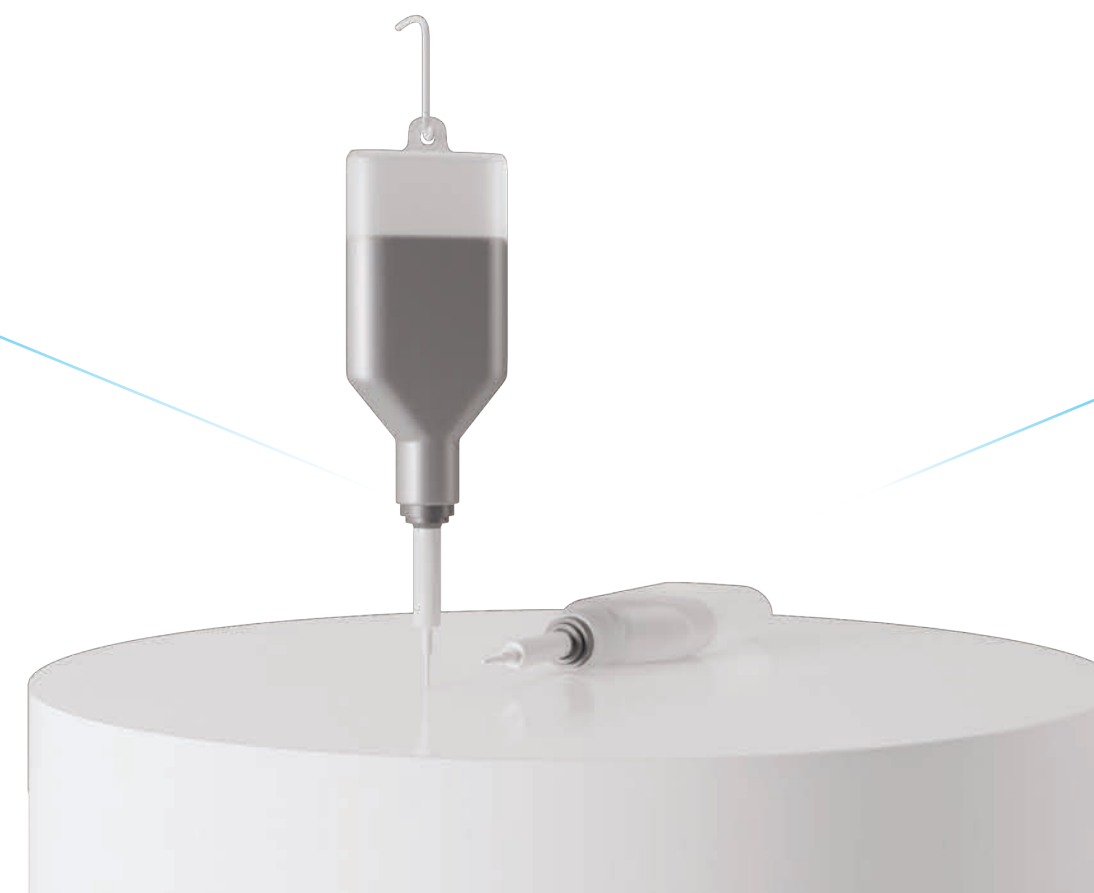
### SOLUTION SUMMARY

- Enables patient care applications, such as interavenous bottles
- Can withstand high temperatures
- Enables fast sterilization and productivity
- SABIC material share of this application is 100%

### VALUE PROPOSITION



- Regulatory Compliance
- Ease of processing
- High purity
- Sustainability



## Transparent Plastic Syringe for Medical application

SABIC® PCGR40 Polypropylene (PP)



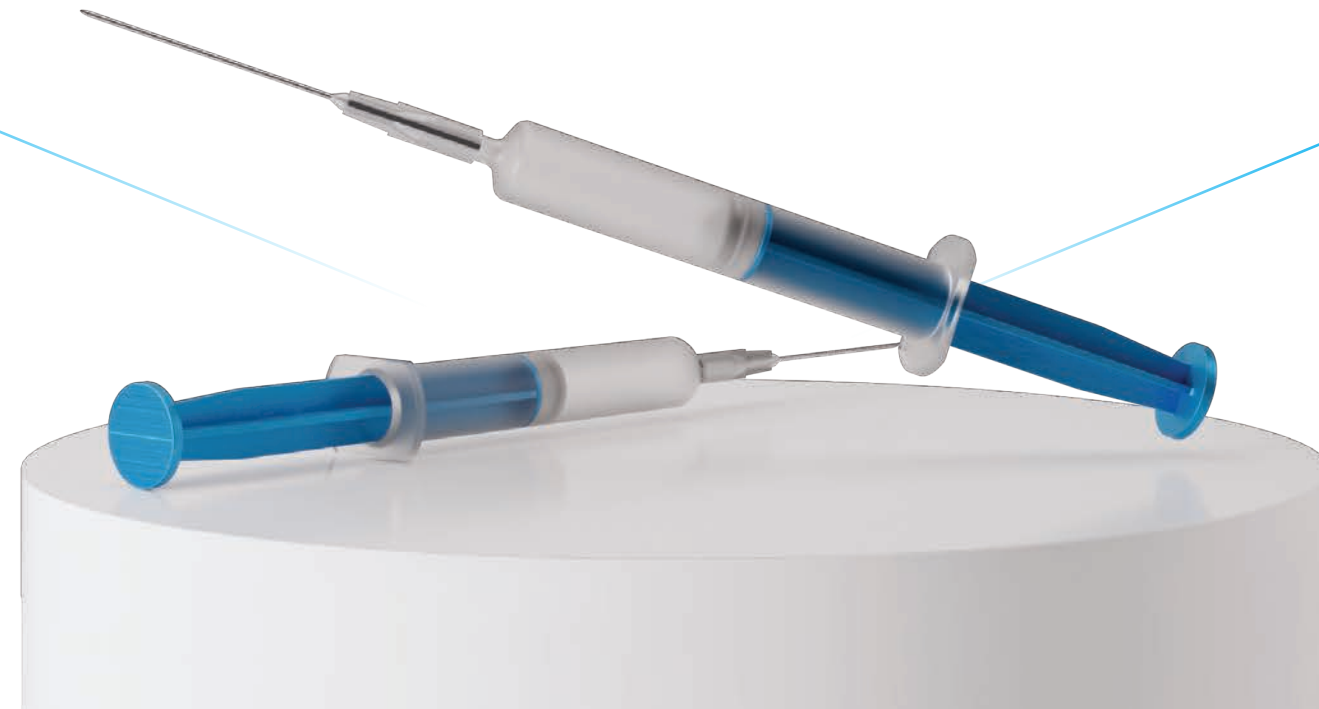
### SOLUTION SUMMARY

- Safe for patients' health
- Compliant with stringent industry standards
- Offers high clarity for dosing accuracy and detection of medicine contaminants
- SABIC material share of this application is 100%

### VALUE PROPOSITION



- Regulatory Compliance
- Transparency
- High purity
- Chemical Resistance



## Healthcare Facemask

SABIC® PP 511A & 519A Polymers



### SOLUTION SUMMARY

- Designed in accordance with N95 facial mask standards
- Exhibits well balanced physical properties
- Approved by major Saudi made brand owners
- Supports localization drive and Saudi Vision 2030
- SABIC material share of this application is 100%

### VALUE PROPOSITION



- Softness
- Regulatory Compliance
- Recyclability
- Easy Processing



## Insulin Pen

SABIC® PP 58MNK10 Copolymer



### SOLUTION SUMMARY

- Used in the production of insulin pens
- Has an excellent balance of stiffness and impact
- SABIC material share of this application is 70%

### VALUE PROPOSITION



- Recyclability/ Sustainability
- Good processability and cycle time (nucleating agent)
- Quality agreement healthcare applications.



## Transperent Blood Test Kit

SABIC® PCG PET60 Polymer



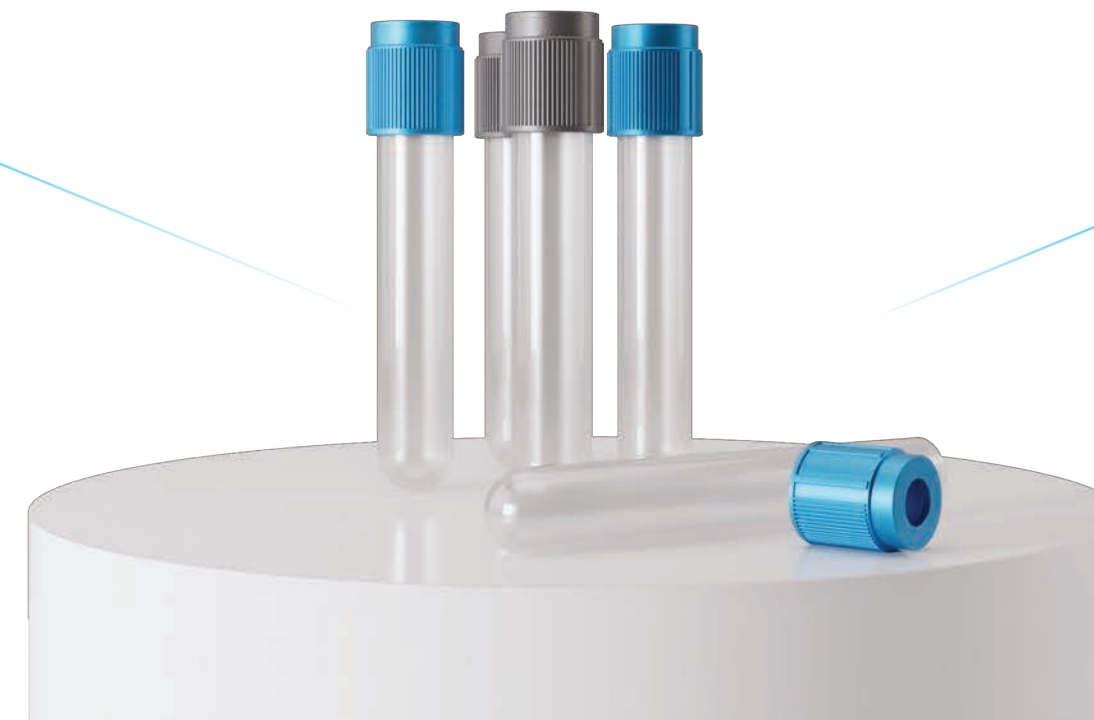
### SOLUTION SUMMARY

- Complies with healthcare standard for blood test kit
- Meets the relevant physiochemical tests
- Tested and utilized by SABIC's customers to produce test kits
- SABIC material share of this application is 95%

### VALUE PROPOSITION



- Regulatory Compliance
- Transparency
- Chemical Resistance
- Impact Strength



## Medical Supplies: Petri Dish, Test Tube Holder & Specimen Jars

### SABIC® PS 125 Polystyrene



#### SOLUTION SUMMARY

- Suitable grade for medical supplies, such as petri-dish, test tube holders and specimen jars applications
- Medium flow and high clarity
- Available locally in Saudi Arabia
- SABIC material share of this application is 100%

#### VALUE PROPOSITION



- Transparency
- Regulatory Compliance
- Availability
- Lower lead time
- Excellent processability



## Metal Replacement for Medical Robots

### ULTEM™ Resins



#### SOLUTION SUMMARY

- High-stiffness material for metal replacement
- High-heat resistant, resistant to hospital chemicals, dimensional stability and good flow for complex designs
- Each part weighs ~ 500 grams

#### VALUE PROPOSITION



- Dimensional stability
- High stiffness
- Heat resistance
- Chemically resistance



## Medical Ventilator Humidity Tanks

### ULTEM™ Resins



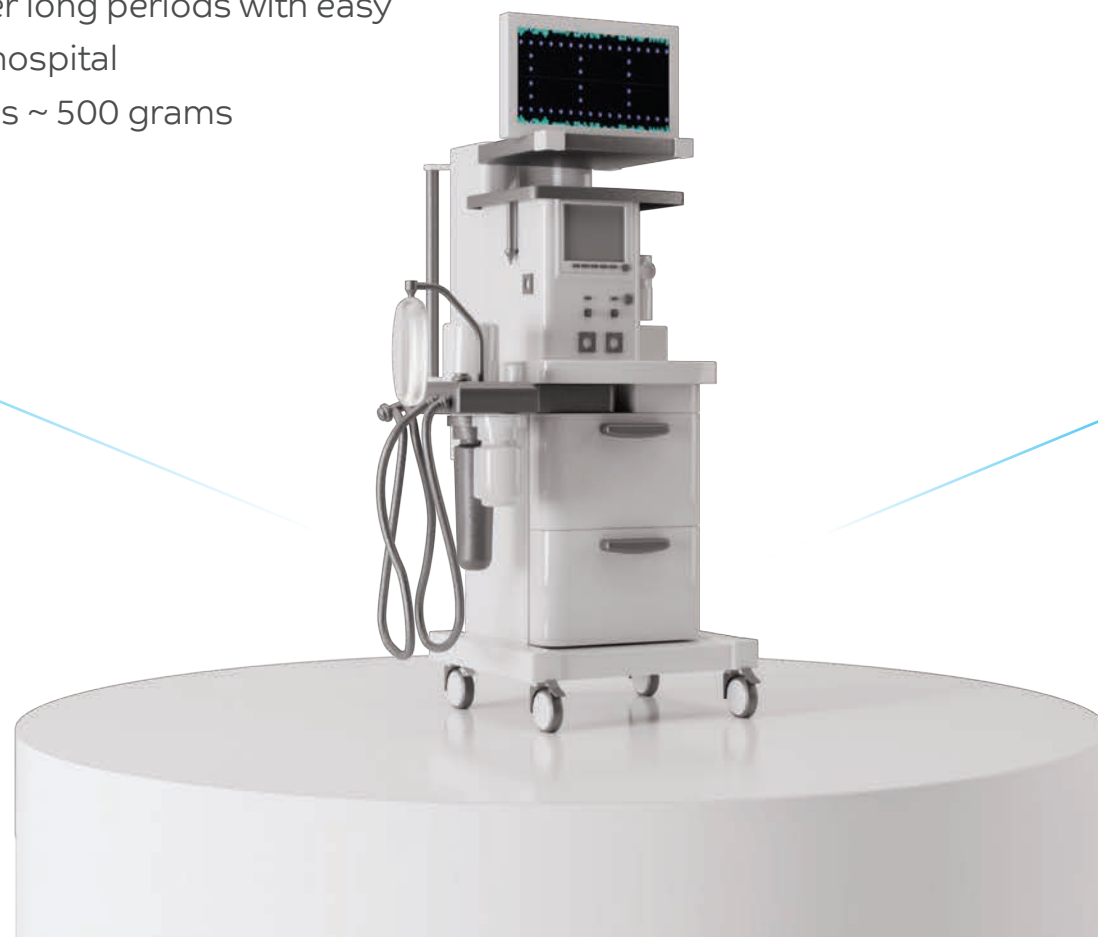
#### SOLUTION SUMMARY

- Key requirements include high heat and hydrolysis resistance, allowing repeated autoclaving at elevated temperatures, chemically resistant to hospital chemicals and durable over long periods with easy mobility within hospital
- Each part weighs ~ 500 grams

#### VALUE PROPOSITION



- Heat resistance
- Chemical resistance
- Healthcare grade / biocompatibility
- High strength



## Ultra Violet-C Light Filtration Module Housing

### ULTEM™ Resins



#### SOLUTION SUMMARY

- Resistant to UV-C light, which is used as a disinfectant
- Requires good color and transparency retention
- Heat resistance for prolonged part life
- Each part weighs ~100 grams

#### VALUE PROPOSITION



- Heat resistance
- Good aesthetics
- UV resistance
- Easy processing



## Medical Pipettes

### ULTEM™ Resins



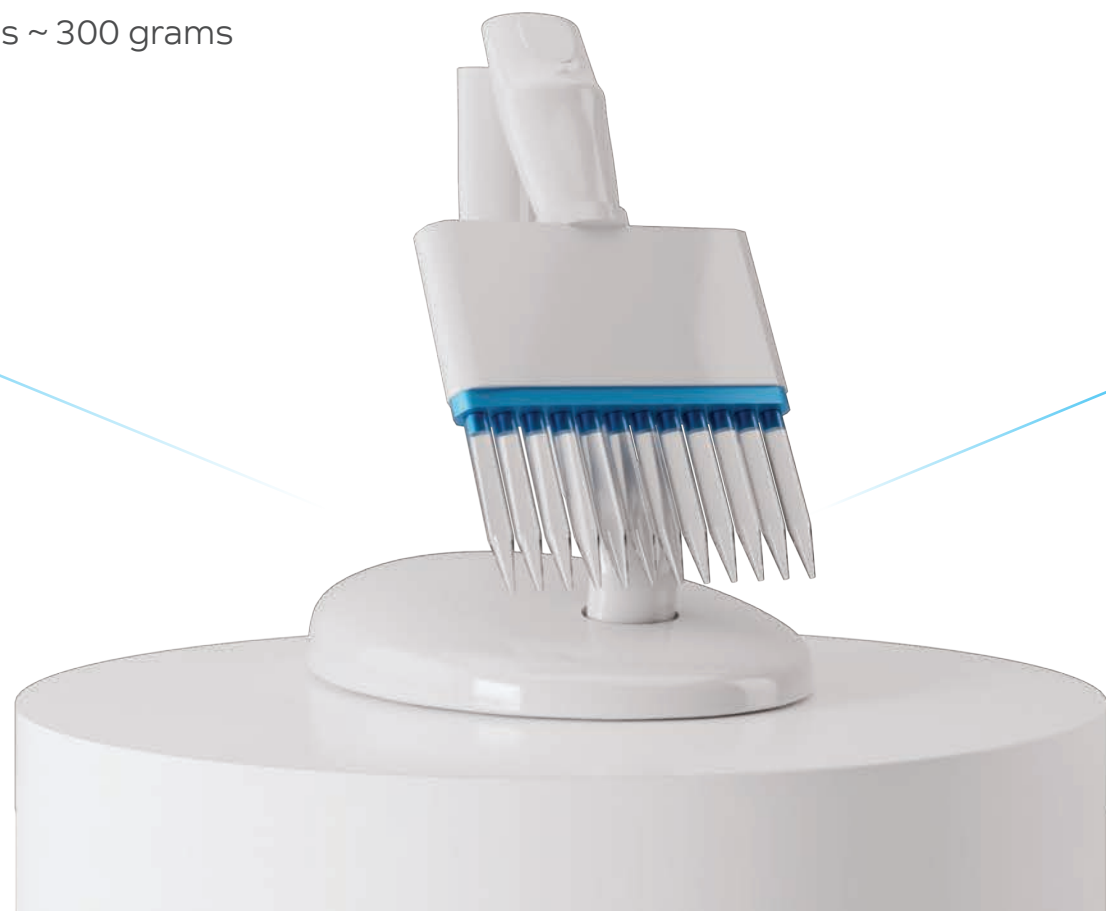
#### SOLUTION SUMMARY

- Able to mold long parts, maintaining good dimensional stability for part accuracy
- Tough, resistant to laboratory chemicals
- Material needs to be food-contact compliant with formulation locked
- Each part weighs ~ 300 grams

#### VALUE PROPOSITION



- Dimension stability
- Chemical resistance
- Food contact compliant
- High Strength/Stiffness



## Skin Stapler

### ULTEM™ Resins



#### SOLUTION SUMMARY

- High stiffness required
- Can withstand standard hospital-sterilization process, allowing property retention in prolonged use
- Custom-coloring capability
- Each part weighs <100 grams

#### VALUE PROPOSITION



- Good mechanical strengths
- Sterilization capability
- Good aesthetics and colorable
- Dimensional stability

