

# Santoprene®. Now design beyond the limits of conventional flexible materials.

Santoprene® thermoplastic rubber. Design freedom that can surpass EPDM, neoprene rubber, polyurethane or other elastomers. Performance that can go beyond nylons, polyesters, modified PPO. Here's why designers like the performance of Santoprene for dynamic parts.

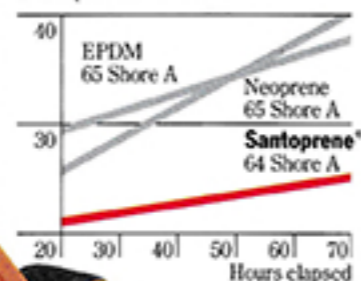
## Reduced finished part cost

Design rubber parts for production on cost-efficient

thermoplastic equipment – extrusion, injection molding, even blow molding. Shorten processing times by a factor of as much as 12 to 1. Skip the problems and cost of thermoset batch compounding

**Santoprene®: more resistance to compression set.**

% compression set at 212°F



and cure times. Replace expensive, over-engineered thermoplastics.

## Seal out the problems

Santoprene parts can seal tight, resist flex fatigue and abrasion. That's because excellent resistance to compression set is built in. You'll also get good resistance to many acids, bases and aqueous solutions.

## Color to match

Design virtually any color into Santoprene parts. Now black is just one of the options. Specify the color you need from a wide spectrum, then use standard olefinic color concentrates with neutral grades of Santoprene.

## Easier design for complex parts

Thick and thin walls? Holes? Undercuts? A definite problem for thermosets. No problem for Santoprene. Simplify multi-part designs. Eliminate metal inserts. Create dual-durometer parts from two hardness grades.

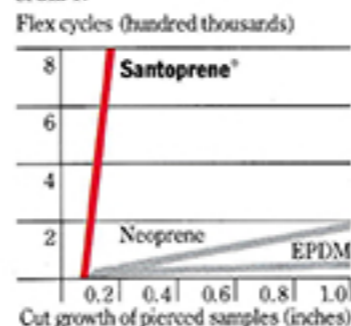
## Performance in heat and cold

Santoprene gives your parts a constant service temperature range from +275°F to -75°F. They stay flexible in heat and cold. No cracking or tackiness. You can't say all that about many rubber and engineered plastic parts.

## Tighter part tolerances

Design Santoprene parts to typical tolerances of ±0.010 inch/inch – two to three times more precise than rubber. You can achieve the dimensions

**Santoprene resists cut growth while flexing.** Ross Flex pierce cut growth, 100 cycles per minute after heat aging at 212°F.\*



## Santoprene. Think of the worldwide design applications:

### Architectural Glazing

Dynamic seals  
Weather stripping  
Skylight gaskets  
Setting blocks  
Spacers  
Wedge gaskets

### Automotive

Electrical wire  
Boots  
Cable covers  
Ducts, hose, tubing  
Steering system boots  
Weather seals  
Gaskets, sleeves  
Grommets  
Stops, plugs

### Construction

Road expansion joints  
Sewer pipe seals  
Welding line connectors  
Rope coating  
Irrigation valves  
Diaphragms  
Water line plugs

### Appliances

Inner cavity seals  
Drainage, fill sumps  
Motor mounts  
Vibration dampers  
Fill tube connectors  
Hair curlers  
Door seals  
Bumpers  
Feet

### Sheet Goods

Roofing membranes  
Die-cut diaphragms  
Gaskets  
Liners, blankets  
Pads  
Seals

### Electrical

Wire insulation  
Cable jackets  
Retractable cord  
Tray cable  
Welding cable  
Mining cable  
Strain reliefs  
Connectors  
Plugs  
Switch boots  
Insulators  
Bushings

### Hardware and Plumbing

Faucet, toilet seals  
Flapper valves  
Casters  
Wheel treads  
Service cart wheels  
Lawn mower wheels  
Conveyor wheels  
Rollers  
Hoses, hose covers  
Vacuum hoses

### Hand & Power Tools

Handles, grips  
Strain reliefs  
Mechanical plugs  
Motor mounts  
Foot pads

you really want. Automated assembly. Better part performance in use.

## One single material – worldwide

Santoprene is the same material throughout the world. Everywhere, its quality meets the same high standard. The variables of batch-compounded rubber are automatically eliminated. Even if the parts you design are made offshore, you never need to worry about inferior quality due to inconsistent material.

## Find out how Santoprene can give you new design freedom

in the Santoprene General Product Bulletin. Write Monsanto, Mail Code E3NH, 800 N. Lindbergh Blvd., St. Louis, MO 63167. Or call Mary Siener at (314) 694-8655 for more information. In Canada, call Brad McCann at (416) 826-9222.



**Santoprene®**  
THERMOPLASTIC RUBBER  
by Monsanto

