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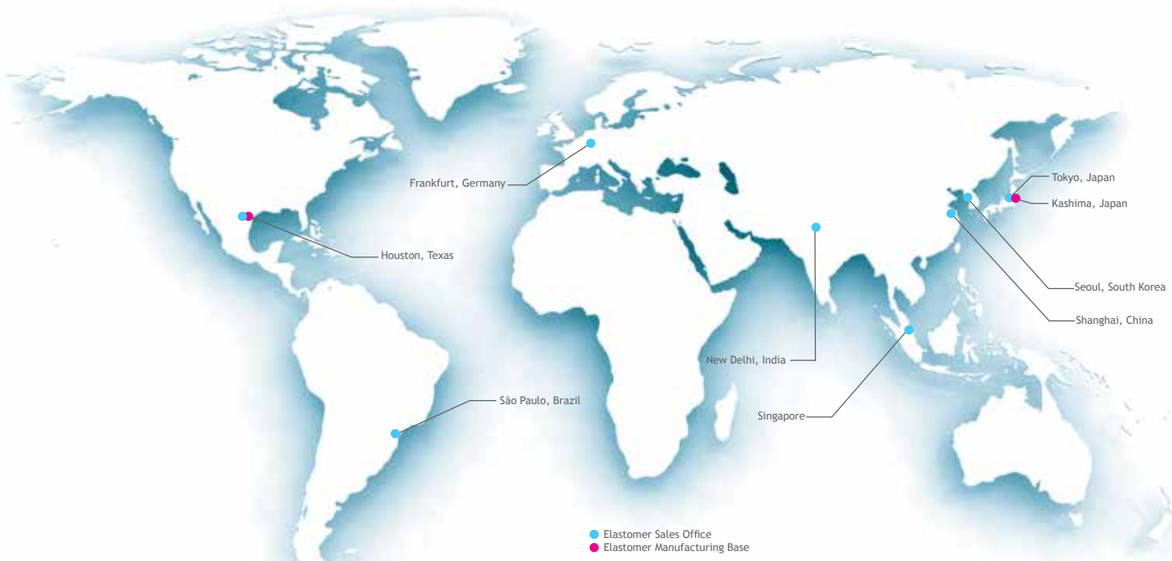
## Adding value to your products – worldwide




SEPTON™, HYBRAR™ and KURARITY™ are Kuraray's trademarks for thermoplastic elastomers (TPEs). They are a special type of synthetic rubber that combine the elastic properties of rubber with the benefits of thermoplastics. They can be processed into almost any shape. TPEs have a pleasantly soft touch and good wear comfort. They also increase shock absorption. What's more, they are recyclable. Kuraray's TPEs are environmentally sound, free of PVC and do not need additional plasticizers. They are used for an extremely wide range of applications including many plastic compounds for everyday products. Examples include toys, toothbrushes, medical tubes, sports equipment, sealants and car tires. The flexible types are used as lubricant additives and base components in adhesives.
Kuraray is a leading supplier of TPEs and offers customers more than 30 different grades with individual properties.

For further information, please contact your local Kuraray office or visit our website.

www.elastomer.kuraray.com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Disclaimer: Precautions should be taken in handling and storage. Please refer to the appropriate Safety Data Sheet for further safety information. In using SEPTON™ and HYBRAR™, please confirm related laws and regulations, and examine its safety and suitability for the application. For medical, health care and food contact applications, please contact your Kuraray representative for specific recommendations. SEPTON™ and HYBRAR™ should not be used in any devices or materials intended for implantation in the human body. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.



06/2019



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# HYBRAR™

## Unique damping properties for various frequencies with HYBRAR™

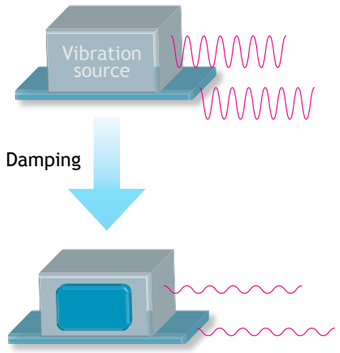
# Thermoplastic Elastomer HYBRAR™
## Unique damping properties at various frequencies

### Key Advantages

- High affinity to polyolefins and poly-styrene
- Rubber like elasticity
- Excellent clarity when blended with polypropylene
- Processable for plasticizer free compounds
- Applicable for sports equipment, foamable sound damping sealants, electronic components, noise reduction in automotive components

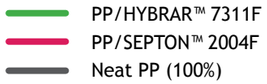
HYBRAR™ is a truly unique triblock copolymer having polystyrene end blocks and a vinyl rich poly-diene mid-block. Due to its peak tan delta near room temperature, HYBRAR™ exhibits exceptional vibration damping and shock absorption properties.

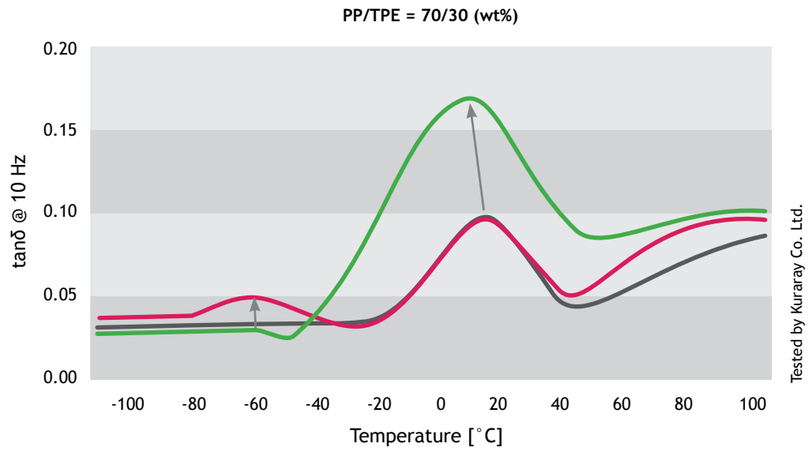
HYBRAR™ can be applied for damping purpose to absorb vibration energy.



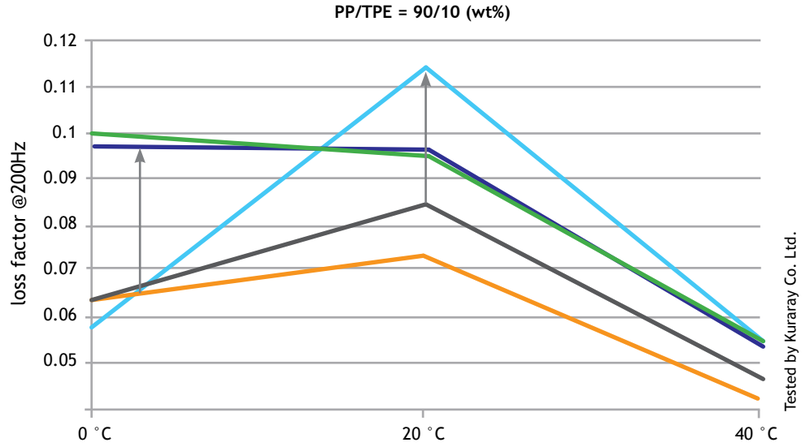

## Properties of HYBRAR™/PP Compounds

Blending HYBRAR™ 7311F increased the peak tanδ and tanδ bandwidth of the PP for maximum damping performance.



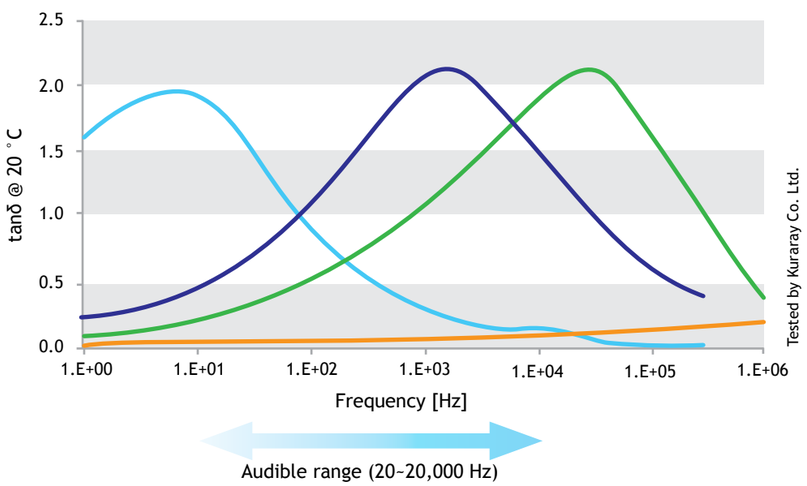




Blending HYBRAR™ increased the peak loss factor of the PP.


## Viscoelasticity of HYBRAR™

HYBRAR™ shows higher tanδ than conventional SEBS at standard conditions (20°C).


## Applications

HYBRAR™ shows high damping properties within a wide range of temperatures and frequencies. It can be blended with other polymers such as PP, PE, PA, ABS, ASA or PC. Moreover HYBRAR™ is a low density material which can reduce weight while improving damping properties.

### Applications

- Automotive foams and sealants (NVH)
- Sporting equipment and tool grips
- Sealants and padding in construction
- Expandable, sound damping foam
- Adhesives with sound and vibration damping properties