



THERMOLAST® H  
 Healthcare TPE

**Our Know-how – Your Advantage**

THERMOLAST® H is a new range of TPE designed exclusively for the healthcare and medical device applications in Asia Pacific. The HC/AP series provides high-quality material solutions which comply with Cytotoxicity ISO 10993-5, GB/T 16886.5, as well as various global food contact and relevant medical standards.

- Adhesion to PP
- All raw materials are (EU) No. 10/2011, GB 4806.7 -2023, and (FDA) CFR 21 approved
- Bio-compatibility testing according to ISO 10993-5 and GB/T 16886.5
- Free from animal ingredients
- Free of PVC, silicon and latex
- Good compression set
- Good haptics
- Pre-coloration available in-house
- REACH SVHC
- RoHS Directive
- Sterilizable (autoclave 121°C, EtO)

**Typical Applications**

- Closures
- Flexible connections
- Function and design elements
- Mouthpieces
- Seals and gaskets
- Soft touch for grips, switches and mats



**Technical Data\***

		TH30GM-LCNT	TH60GM-LCNT	TH90GM-LCNT
Density	g/cm3	0.89	0.89	0.89
Hardness	Shore A	30	60	90
Tensile strength	MPa	7	12	15
Elongation at break	%	800	800	700
Tear resistance	N/mm	9	18	40
Compression set 23°C/72h	%	15	24	-
Compression set 70°C/24h	%	33	41	-

\*The HC/AP portfolio series hardness range is available from 30 to 90 Sh A.

**TALK TO OUR EXPERTS!**

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THERMOLAST® H HC/AP series shows good stability in various chemical solutions, rendering them suitable for various of applications in the medical or healthcare sectors. The test specimen are fully immersed in the concerned chemical and aged at various temperatures up to 14 days. The materials' stability are assessed and compared based on hardness, tensile strength, elongation at break, and tear resistance.

*Note:*

Materials chemical resistance to any substance strongly depends on the conditions of contact, including but not limited to temperature, time, surface geometry and mechanical stress or strain. Therefore, all results presented in this handout shall only be interpreted as indications to the final parts of chemical resistance. Customer is strongly advised to perform additional tests on the finished goods to unequivocally determine suitability for the particular process or end-use application. KRAIBURG TPE does not warrant or assume any liability with regards to the use of the information presented hereafter.

HC/AP Series					
Chemical	Hardness [Shore A]	Temperature [°C]	Duration [d]		
			3	7	14
Deionized Water	70	80	Green	Green	Green
Sodium Chloride (10 % w/w, Aqueous Solution)	70	23	Green	Green	Green
Sodium Hydroxide (50 % w/w, Aqueous Solution)	70	40	Green	Green	Green
Chlorinated Water (20 mg / L)	30	23	Green	Green	Green
	50	23	Green	Green	Green
Hydrogen Peroxide (30 % w/w, Aqueous Solution)	50	23	Green	Green	Green
Formaldehyde (4 % w/w, Phosphate Buffer)	50	23	Green	Light Green	Light Green
Acetic Acid (> 99 %)	70	23	Green	Green	Green
Ethanol (>95 % v/v +1 % MEK)	50	23	Green	Green	Green
	70	23	Green	Green	Green
Isopropanol (70 % w/w, Aqueous Solution)	70	23	Green	Green	Green
Glycerol (> 99.5 %)	70	23	Green	Green	Green

### Chemical Resistance Rating:

Stability Rating			
Excellent	Good	Fair	Poor
$\Delta \leq \pm 10 \%$	$\Delta \leq \pm 20 \%$	$\Delta \leq \pm 50 \%$	$\Delta \leq \pm 50 \%$