

## Product Highlights

- Operating temperature up to +650°C (+1202°F)
- Peak temperature +750°C (+1382°F)
- Excellent thermal insulation
- Extremely flexible
- Conforms to component
- Low profile

## Typical Applications

- Exhaust Gas Recirculation (EGR) Tubes
- Exhaust System Components



**ThermFlex® 1224** is a knitted sleeve developed for insulation of high temperature exhaust systems. Designed with basalt yarns, ThermFlex 1224 can withstand temperatures up to +750°C (+1382°F).

The high degree of insulation provided by ThermFlex 1224 enables exhaust gas to maintain temperature as it moves through the exhaust system. Maintenance of exhaust gas temperature is important in order to ensure complete conversion of exhaust gas and particulates. Complete conversion is necessary to meet the increasingly strict emission regulations set in place by government mandate.

ThermFlex 1224's innovative design can expand up to 1.5 times its own diameter and accommodates flanges and bends typically seen on exhaust system components.



Our manufacturing sites are  
certified ISO 9001, IATF 16949,  
or AS/EN 9100, ISO 14001  
and ISO 45001 (Selected Sites)

# Performance Data – ThermFlex® 1224

Property	Test Method	Result
PHYSICAL		
Thermal Endurance	BH100-521	Pass - No degradation
Cold/Wet Endurance	BH100-522	Pass - No degradation
Thermal Containment	BH100-509	See table below
Flammability	SAE J369	Does not ignite
	D45 1333	Type A - No ignition
Flammability with Oil Contamination	BH100-524 (ref. SAE J369)	Self-extinguishing
Vibration	BH100-507	Retains Structural Integrity
CHEMICAL		
Fluid Resistance	BH100-003F	No degradation or loss of flexibility
	50/50 Antifreeze/Distilled Water	
	5% NaCl	
	Transmission Fluid	
	Diesel Fluid LSRD-4	
	ASTM Reference Fuel C	
	SAE 5W30	
	Brake Fluid SAE RM-66	
Salt Spray	Power Steering Fluid	Pass
	Windshield Washer Fluid	
	ASTM G85	
RESISTANCE TO WASHING		
Power Washing Endurance	BH 100-539	No degradation

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

## Thermal Containment Test per BH100-509 on ThermFlex® 1224 2" (51mm)

Exhaust Pipe Parameters	
Inlet Gas Temperature	+832°C
Pipe Surface Temperature (w/ ThermFlex® 1224)	+649°C
Sleeve Surface Temperature (w/ ThermFlex® 1224)	+387°C
Results	
Thermal Containment (Temperature Reduction)	+262°C
Temperature at 10mm away from sleeve (ambient)	+137°C
Temperature at 25mm away from sleeve (ambient)	+106°C
Temperature at 100mm away from sleeve (ambient)	+76°C

**Note:** Thermal Containment = Pipe Surface Temperature - Sleeve Surface Temperature

## Availability

ThermFlex 1224 is available in a range of sizes and lengths designed to meet specific application requirements. Please contact your sales representative for availability.



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 EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560  
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