

# Tubing for Life Sciences Applications

We understand that tubing choice is critical in your pharmaceutical, biotech, medical, or other bioprocessing applications. Our advanced materials expertise and quick-turn custom capabilities enable us to provide tubing that meets complex demands for material integrity across upstream and downstream applications.

This information is to be used as general guidelines only. Please contact Entegris with questions on physical properties or tubing validation information.

## Standard Tubing

Product	Material class	Weldable/sealable	Durometer, Shore A	Temperature use range	ADCF or EMA/410/01 Rev 3 Compliant	Latex-free	BPA-free
AdvantaFlex® AdvantaPure	TPE	Yes	65	-66° to 135°C (-87° to 275°F)	x	x	x
C-Flex® Saint-Gobain	TPE	Yes	60	-67° to 135°C (-89° to 275°F)	x	x	x
AdvantaSiL® APLT AdvantaPure	Silicone	No	50	-112° to 175°C (-170° to 347°F)	x	N/A	N/A
AdvantaSiL® APST AdvantaPure	Silicone	No	50	-73° to 204°C (-99° to 399°F)	x	x	x
Pump Grade APSPG AdvantaPure	Silicone	No	50	-73° to 204°C (-99° to 399°F)	x	x	x

Product	REACH	RoHS	FDA- (21 CFR177)	USP <661>	USP <85>	USP <87>	USP <88>/ USP Class VI	ISO 10993-	USP 788
AdvantaFlex® AdvantaPure	x	x	177.2600	x	x	x	x	3, 4, 5, 11	x
C-Flex® Saint-Gobain	x	x	N/A	x	x	x	x	3, 4, 5, 11	N/A
AdvantaSiL® APLT AdvantaPure	x*	x	177.2600	x	x	x	x	11	x
AdvantaSiL® APST AdvantaPure	x*	x	177.2600	x	x	x	x	3, 4, 5, 11	x
Pump Grade APSPG AdvantaPure	x*	x	177.2600	x	x	x	x	3, 4, 5, 11	N/A

\*Contains a substance of very high concern (SVHC)  
N/A = not available

## Alternative Tubing

Product	Material class	Weldable/sealable	Durometer, Shore A	Temperature use range	ADCF or EMA/410/01 Rev 3 Compliant	Latex-free	BPA-free
Tygon® 3350 Cole-Parmer	Silicone	No	50	-80° to 200°C (-112° to 392°F)	x	x	x
STHT-C Saint-Gobain	Silicone	No	50	-62° to 260°C (-80° to 500°F)	x	x	x
Masterflex I/P® 82 MasterFlex	Silicone	No	68	-50° to 230°C (-58° to 446°F)	x	N/A	N/A
Pharma-65 DuPont	Silicone	No	65	-50° to 250°C (-58° to 482°F)	x	x	x
PharMed® BPT MasterFlex	PP-TPE	No	64	-51° to 132°C (-60° to 270°F)	N/A	N/A	N/A
Clearflo® 70 New Age Industries	PVC	Yes	70	-40° to 79°C (-40° to 174°F)	N/A	N/A	x

Product	REACH	RoHS	FDA- (21 CFR177)	USP <661>	USP <85>	USP <87>	USP <88>/ USP Class VI	ISO 10993-	USP 788
Tygon® 3350 Cole-Parmer	x*	x	177.2600	x	x	x	x	4, 5	N/A
STHT-C Saint-Gobain	x	x	177.2600	x	N/A	x	x	1, 3, 4, 11, 18	x
Masterflex I/P® 82 MasterFlex	N/A	x	177.2600	N/A	N/A	N/A	x	N/A	N/A
Pharma-65 DuPont	x*	x	177.2600	x	x	x	x	3, 4, 5, 6, 10, 11	x
PharMed® BPT MasterFlex	x	x	177.2600	N/A	N/A	N/A	x	N/A	N/A
Clearflo® 70 New Age Industries	x	x	N/A	N/A	N/A	N/A	x	N/A	N/A

\*Contains a substance of very high concern (SVHC)

N/A = not available

## Tubing Characteristics

Product	Peristaltic pump life	Autoclave tolerance	Gas permeation	Animal-derived components	Visual clarity	Sterilization method
C-Flex 082 Saint-Gobain	Good	Low	Very low	No	Transparent	Gamma
C-Flex 374 Saint-Gobain	Good	Low	Very low	No	Transparent	Gamma
Tygon 3350 Cole-Parmer	Fair	High	Moderate	No	Translucent	Gamma; autoclave
PharMed BPT MasterFlex	Excellent	High	Very low	Yes	Opaque	Gamma; autoclave
AdvantaSil APSPG AdvantaPure	Excellent	High	Moderate	No	Translucent	Gamma; autoclave
AdvantaFlex APAF-BP AdvantaPure	Good	Low	Very low	No	Transparent	Gamma
AdvantaSil APST AdvantaPure	Fair	High	Moderate	No	Translucent	Gamma; autoclave
Pharma-65 DuPont	Very good	High	Moderate	No	Translucent	Gamma; autoclave

### FOR MORE INFORMATION

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