

Flexalloy[®]

PVC ELASTOMERS

*Abrasion-, Chemical- and Oil- Resistant
Thermoplastic Compounds
with Excellent Temperature Flexibility for
Wire and Cable Applications*

Compared to other
Wire & Cable elastomers,
PVC-based Flexalloy[®]
offers superior mechanical
properties, flame retardancy
and chemical resistance.

- Good compression set resistance
- Flammability ratings - UL Riser/CSA FT4
- Oil resistance complies with UL 62 & 1277 (I,II)



INSULATION



ELECTRIC VEHICLE CHARGING



INDUSTRIAL AUTOMATION

FLEXALLOY® PVC ELASTOMERS

With a brittle point <-60°C and a high temperature rating of 105°C, Flexalloy elastomers are UL-Recognized components for outdoor and wet location applications. These compounds, which are extremely flexible, are resistant to sunlight, abrasion, oils, and chemicals, have a high degree of flame retardance.

SELECT APPLICATIONS - SUGGESTED COMPOUNDS

APPLICATIONS	INSULATION COMPOUNDS	JACKET COMPOUNDS
Portable Power Cable	Flexalloy 89504-90 FR	Flexalloy 9602-72 FR
Stage Lighting Cable	Flexalloy 89504-90 FR	Flexalloy 9602-72 FR Flexalloy 9606-65 LG
Flexible Power Cords	Flexalloy 89501-83 Flexalloy 89501-83 FR Flexalloy 89504-90 Flexalloy 98504-90 FR	Flexalloy 9602-72 FR Flexalloy 9602-72 FR NAT 14 Flexalloy 9606-65
Audio & Video Cable	-	Flexalloy 9602-72 FR Flexalloy 9606-65 LG Flexalloy 9618-82
Industrial Network Cable	-	Flexalloy 9618-82
Welding Cable	Flexalloy 89504-90 FR	Flexalloy 9602-72 FR

INSULATION

- UL recognized as both 75°C wet rated TPE insulation and 105° C wet rated THHW (PVC) insulation
- Flammability up to FT4 when combined with suggested jacket compound
- Good abrasion and crush resistance



FLEXALLOY® COMPOUNDS		89501-83*	89501-83 FR*	89504-90	89504-90FR
Test Method	Property				
ASTM D794	Temperature Rating, °C	105	105	105	105
ASTM D792	Specific Gravity	1.28	1.31	1.24	1.28
ASTM D2240	Shore Hardness, delayed	80A	81A	90A	90A
ASTM D638	Tensile Strength, psi	2600	2600	2830	2830
ASTM D638	Tensile Elongation, %	250	250	340	340
ASTM D746	Brittle Point, °C	-49	-49	-46	-46
ASTM D2863	Oxygen Index, %	26	29	27	30
UL 62	Oil Resistance	Yes	Yes	Yes	Yes
UL 1277		Yes	Yes	Yes	Yes
ASTM D150	Dielectric Constant @ 1 MHz	3.34	3.38	3.18	3.20
ASTM D150	Dissipation Factor @ 1 MHz	0.088	0.089	0.087	0.081

*These are general purpose insulations not intended for use where wet electrical performance is required.

ELECTRIC VEHICLE CHARGING STATIONS

- Excellent low-temperature flexibility
- Chemical and oil resistant
- UV and weather resistant
- Crush and impact resistant



FLEXALLOY® COMPOUNDS		9602-72FR	9612-75LG	9615-80
Test Method	Property			
ASTM D794	Temperature Rating, °C	105	105	105
ASTM D792	Specific Gravity	1.28	1.23	1.31
ASTM D2240	Shore Hardness, delayed	72A	75A	80A
ASTM D638	Tensile Strength, psi	1930	2450	2490
ASTM D638	Elongation, %	390	340	400
ASTM D746	Brittle Point, °C	-48	-60	-53
ASTM D2863	Oxygen Index, %	29	27	30
UL 62	Oil Resistance	Yes	Yes	Yes
UL 1277		Yes	Yes	Yes

INDUSTRIAL AUTOMATION

- Oil and chemical resistant
- Good low temperature performance
- Up to FT4 flammability
- High flex life



FLEXALLOY® COMPOUNDS		9602-72FR NAT 14	9605-70FR	9618-82
Test Method	Property			
ASTM D794	Temperature Rating, °C	105	90	105
ASTM D792	Specific Gravity	1.28	1.32	1.33
ASTM D2240	Shore Hardness, delayed	72A	70A	82
ASTM D638	Tensile Strength, psi	1930	1630	2490
ASTM D638	Elongation, %	390	380	390
ASTM D746	Brittle Point, °C	-48	-43	-60
ASTM D2863	Oxygen Index, %	29	30	33
UL 62	Oil Resistance	Yes	Yes	Yes
UL 1277		Yes	No	Yes



Vinyl Manufacturing Sites

About Teknor Apex

The Teknor Apex Company, a privately-owned company founded in 1924, is one of the world’s leading customer-specific plastic compounders. Teknor Apex produces flexible and rigid vinyl, thermoplastic elastomers, polyamides, specialty compounds, color masterbatches, chemicals and garden hoses.

The company is based in Pawtucket, RI, USA. It operates fourteen production plants worldwide: in the United States, Belgium, Germany, China and Singapore.

Industries Served



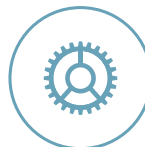
BUILDING & CONSTRUCTION



CONSUMER PRODUCTS



ELECTRICAL & ELECTRONICS



INDUSTRIAL



MEDICAL



PACKAGING



TRANSPORTATION

Flexalloy®

Contact Teknor Apex to begin customizing your solution today.

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