



# Luperox® AIR® XL80 Organic Peroxide for EPDM Compounds

## Hot air curable organic peroxide for improved productivity and mechanical performance

Arkema introduces Luperox® AIR® XL80 an improved free-flowing formulation for curing EPDM compounds used in a wide range of applications. AIR® technology offers the flexibility to cure EPDM compounds in the presence of air with tack-free surface. Users can exceed the compression set and heat-aging performance offered by traditional sulfur vulcanization, without nitrosamine by-products.

The compound formulations shown below illustrate the performance as tested by Arkema application scientists.

EPDM Compound	PHR	Sulfur Cure	PHR	Peroxide Cure	PHR
EPDM Compound	100	EPDM	244	EPDM Compound	244
N550	100	Sulfur	2.5	<b>Luperox® AIR® XL</b>	5.00
White Oil	40	ZnO	0.5	<b>+20% Luperox® AIR® XL80</b>	6.00
PEG	3	Stearic acid	1.6	<b>+25% Luperox® AIR® XL80</b>	6.25
TMQ	1	MBTS (75)	1.1		
Total	244	MBT (80)	0.85		
		TMTD (80)	0.2		

\*PHR = parts per hundred resin

### RPA Rheometer Cure Data

Data generated by Arkema internal testing

RPA2000 (Alpha Technologies) 185°C - 12min, 100 cpm, 1.0 deg arc

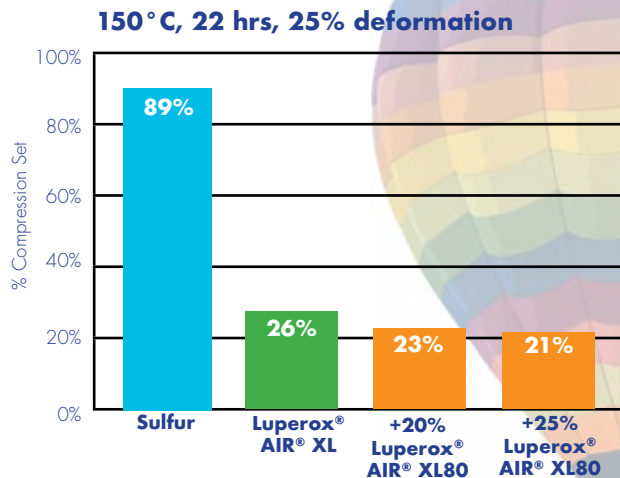
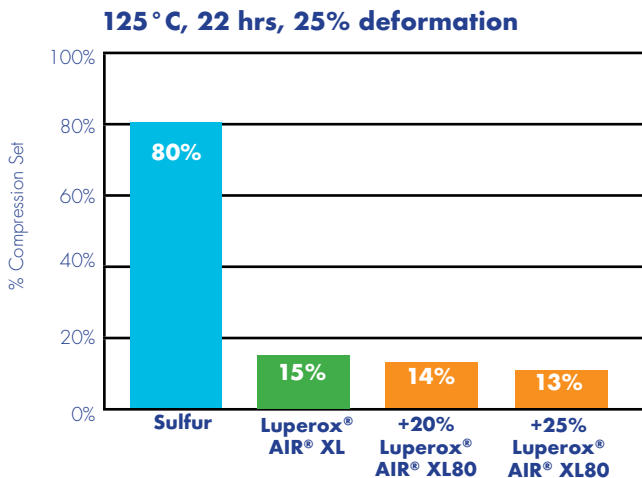
- Offers equivalent crosslink density to Luperox® AIR® XL when adjusting for % assay.
- Achieves tack-free rubber surface in presence of oxygen.

	Luperox® AIR® XL 5.0 phr	Luperox® AIR® XL80 6.0 phr	Luperox® AIR® XL80 6.25 phr
MH – ML (dN-m)	18.77	18.21	18.82
TS2 (minutes)	0.58	0.58	0.57
Tc90 (minutes)	3.53	3.50	3.56

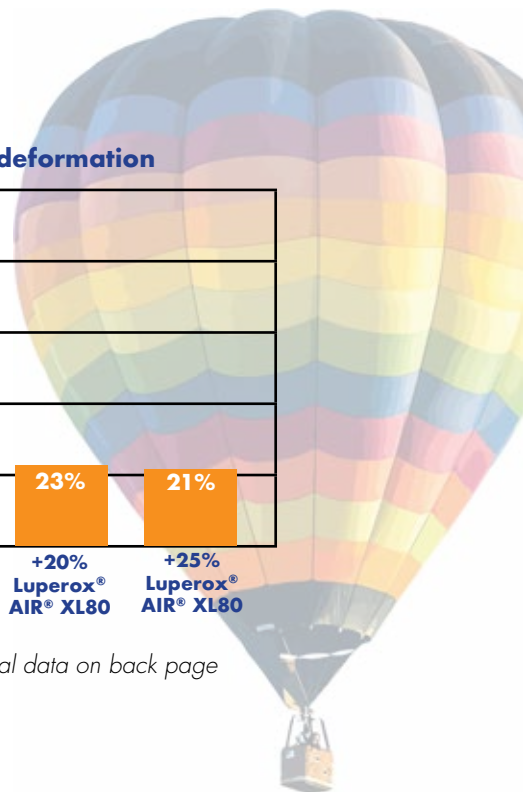
### Performance in % Compression Set

Data generated by Arkema internal testing

- Similar to standard peroxide, outperforms sulfur cure – even in the presence of air.
- Improved heat aging performance in high temperature applications compared to sulfur cure.



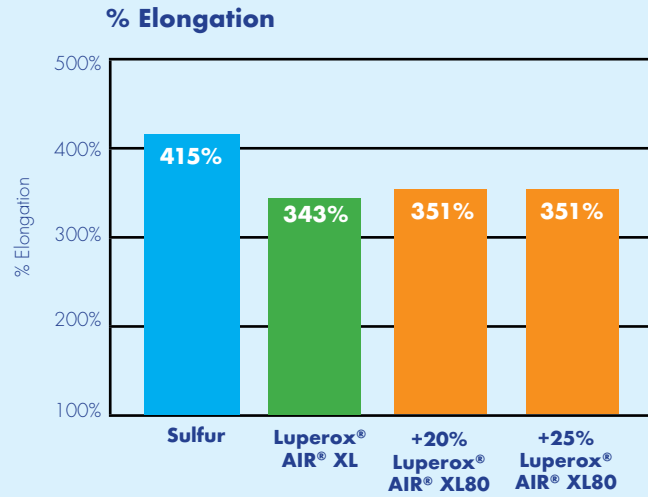
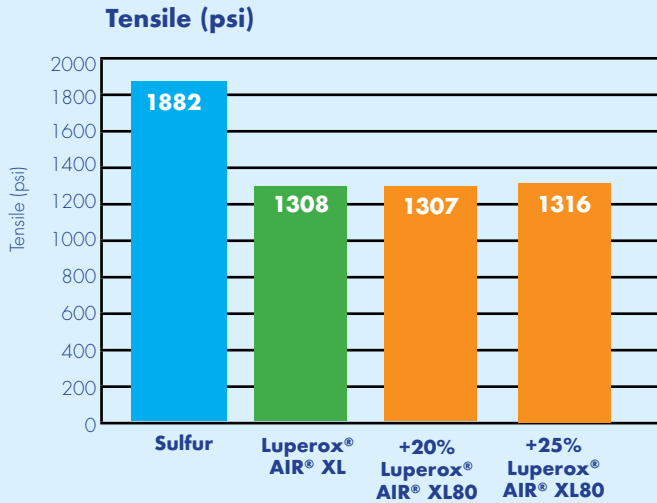
additional data on back page



# Tensile Strength and % Elongation at Break

Data generated by Arkema internal testing

- Mechanical properties are comparable to sulfur cure.
- Excellent performance to standard peroxide cure – even in the presence of air.



## Standard Packaging

15 kg plastic bag in a carton box.

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Patented. Patent Pending.

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