

Addimat AO 3504

Product brochure



Key Features

- **FDA Compliant, with no hazardous ingredients**
- **Oeko-Tex Eco passport certification**
- **Excellent compatibility and colour retention with most polymers**
- **Nonstaining**
- **High heat stability**
- **Low volatility and extractability**

Applications

- Bedding Mattress
- Food Packaging
- Carpet Backing
- Food Contact Gloves
- Textile Coating
- Paper Coating

Product overview

Addimat AO 3504 is a phenolic antioxidant that has the capability to perform on its own, unlike the thioether option. Addimat AO 3504 is a sustainable, FDA compliant and non-hazardous antioxidant in aqueous form that can perform same or better than conventional antioxidants. It is a radical scavenger which prevents thermal degradation of many polymeric materials. Offers excellent long-term heat stabilization. It should also be noted that due to the high molecular weight and molecular structure, the antioxidant has low volatility and excellent resistance to extraction.



Property

Addimat AO 3504

| | |
|--------------------|----------------------|
| Chemistry | Phenolic Antioxidant |
| Form | Aqueous dispersion |
| Active content | 50% |
| Molecular weight | > 1,000 g/mol |
| Melt range | 110-130 °C |
| Recommended Dosage | 0.2-2.0 phr |



Aging Test Evaluation with Different Polymers

The AO dispersions are tested at a dosage of 0.7 parts active AO on 100 dry rubber with aging test done at 100°C and 140°C, with NBR Polymer and XSB Polymer.

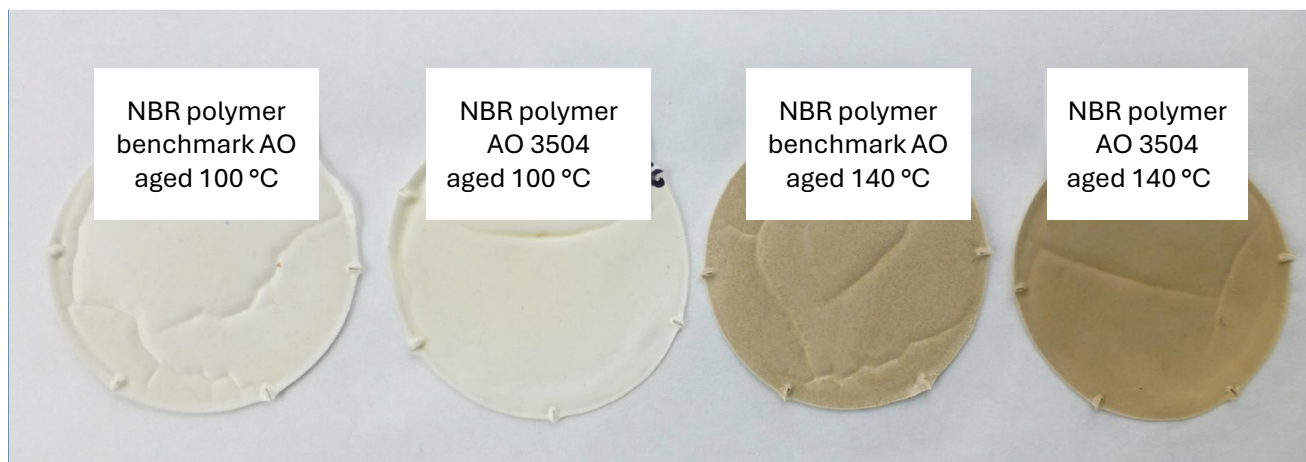


Image 1:

Vulcanised films of NBR polymer with Addimat AO 3504 and Industrial standard AO as benchmark.

Both aged at 100°C and 140°C for 24 hours.

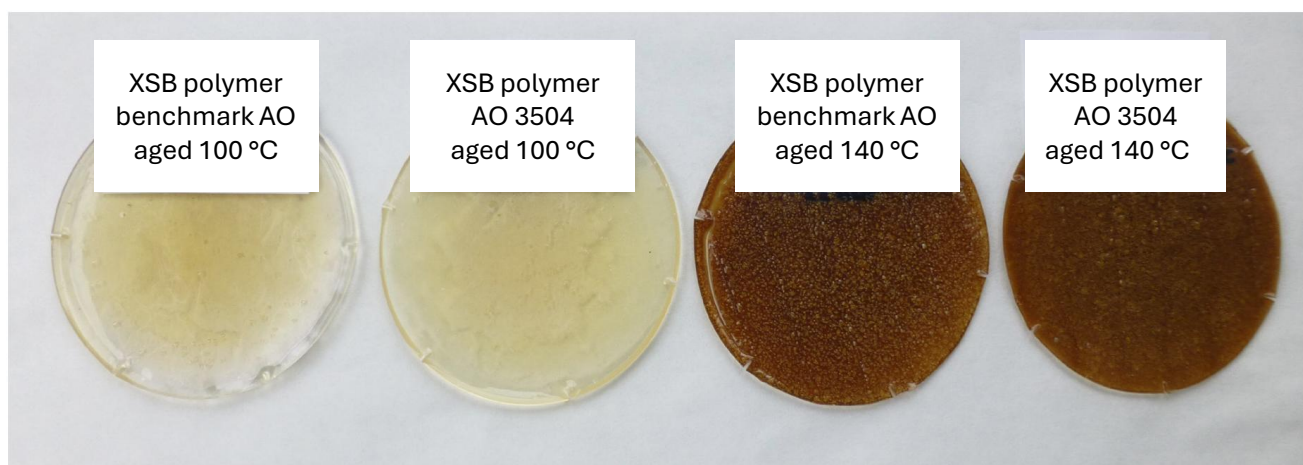
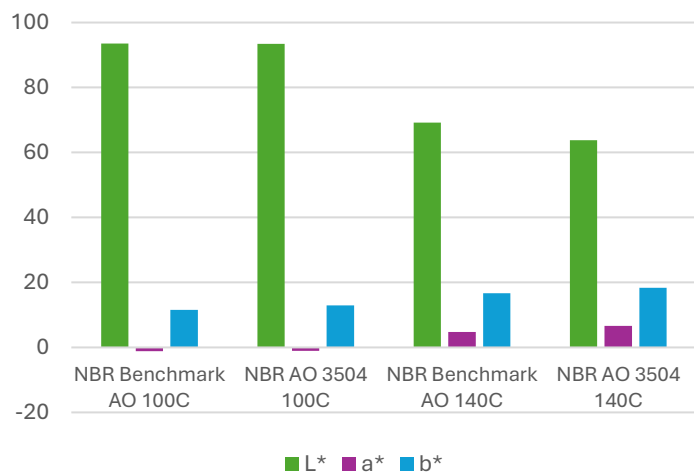


Image 2:

Dried films of XSB polymer with Addimat AO 3504 and Industrial standard AO as benchmark.

Both aged at 100°C and 140°C for 24 hours.

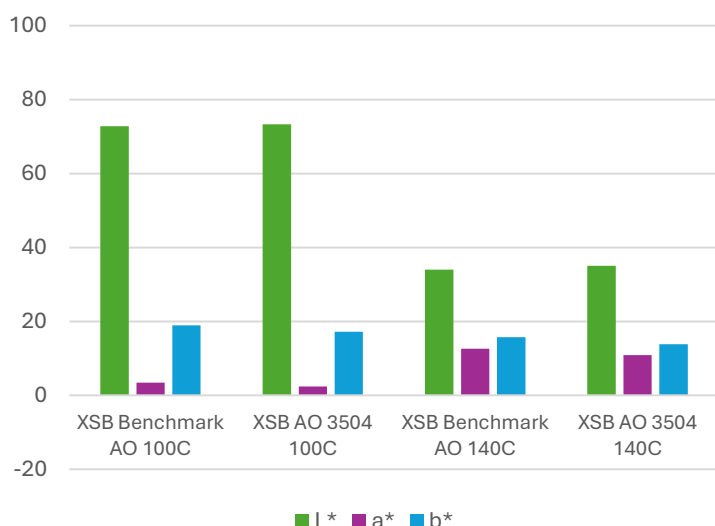
CIELAB Colour evaluation NBR latex



Graph 1:

Colour measurement on vulcanized NBR latex show ageing properties for Addimat AO 3504 which are comparable with the industrial standard AO.

CIELAB Colour evaluation XSB latex



Graph 2:

Colour measurement on dried XSB latex show ageing properties for Addimat AO 3504 which are comparable with the industrial standard AO.

Commercial Team

Bas.deRuiter@matcochemicals.com
+31 412 681751 | Mobile: +31 6 20 49 07 07
Matco Chemicals B.V.

Paul.vanDijk@matcochemicals.com
+31 412 681781 | Mobile: +31 6 10 36 84 39
Matco Chemicals B.V.

Philippe.Berckmoes@matcochemicals.com
+32 56 78 80 60 | Mobile: +32 470 08 21 78
Matco N.V.

Matco Chemicals B.V.

The Netherlands
IJsselstraat 41
5347 KG Oss
+31 412 681 700

Matco N.V.

Belgium
Textielstraat 26
B-8790 Waregem
+32 56 78 80 60

Matco S.A.E.

Egypt
Industrial Zone 1-B
10th of Ramadan City Sharkiya
+2 055 4499260

