

Milliken® Milliguard™ AOX

Antioxidant for Polyurethane

Milliguard AOX Antioxidant product portfolio consists of individually tailored proprietary blends that are based on a reactive, polymeric carbon-centered radical scavenger that are designed to protect thermoset polymers from oxidative degradation. These synergistic combinations are effective at low levels in polyurethane formulations to prevent scorch, improve gas-fade, and reduce emissions.

Advantages

- **Scorch reduction:** Reduces thermally induced degradation caused by high temperature during processing.
- **Reduced emissions:** VOC emissions can be significantly reduced with the inclusion of reactive antioxidants.
- **High level efficacy vs traditional AOs:** Milliguard AOX combinations are specifically tailored to enhance synergistic interactions and reduce overall loading levels.
- **Excellent compatibility** with polyether and polyester foams.
- **No color formation due to NOX gases:** Milliguard AOX offerings are designed to minimize yellowing effects from exposure to nitrous oxide gas.



Technical Specifications

PROPERTY	AOX-1	AOX-100	AOX-115	AOX-120	AOX-125	AOX-197
Physical form	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Color	Light Yellow to Amber	Light Yellow to Amber	Light Yellow to Amber	Light Yellow to Amber	Light Yellow to Amber	Light Yellow to Amber
Specific gravity (@ 25°C)	0.97	1.12	0.96	0.97	0.96	0.98
Viscosity (mPa.s @ 25°C)	< 20000	5800	1100	< 3000	< 1000	< 5000
pH	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Hydroxyl number (mg KOH/g)	68	151	≤ 10	≤ 15	≤ 10	≤ 10
Phenol free	Yes	Yes	Yes	Yes	No	Yes
Amine free	Yes	Yes	Yes	Yes	Yes	Yes
VDA278 compliant	Yes	Yes	Yes	No	No	No
Loading levels (%)	0.2-1.0	0.2-1.5	0.2-1.0	0.2-1.5	0.2-1.5	0.2-1.5

For more information, please contact your Milliken Representative.

PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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