

# Naugard™ Bio XL

## Description

Naugard™ Bio XL is an ultra-fast accelerator for the sulfur curing system containing up to 90% bio-sourced raw materials. It can be used for the fast & efficient curing of the natural & synthetic rubbers. The accelerator does not release toxic nitrosoamines to atmosphere, therefore, it is classified as a nitrosoamine-safe curing accelerator. Hence, it can be used as a primary or secondary accelerator to completely or partially replace other typically used rubber curing accelerators. The unique properties include scorch safety, higher elongation, improved compression set, higher heat resistance, higher solubility, low odor, and reduced blooming in the rubber compounds.

## General Product Data

### Specifications

Appearance	Liquid & 70% active powder
Assay,%	>82
Flash Point,°C	>85
Specific Gravity	0.925

Tests methods are available upon request.

## Application

Naugard™ Bio XL is an ultra-fast accelerator for unsaturated rubbers such as NR, SBR, BR, EPDM, IR and NBR. The rubber vulcanizates have outstanding high temperature aging properties, therefore, it can be used in applications requiring enhanced heat resistance. Due to its proprietary chemical structure, Naugard™ Bio XL can be used in co-curing dissimilar rubber blends, such as, EPDM/NBR, NR/EPDM, as well as SBR/BR blends. The studies have shown to improve the rolling resistance and wet grip properties of the rubber vulcanizates in a classic silica passenger car tire tread. It has an excellent solubility in natural and synthetic rubbers, therefore, the rubber compounds and vulcanizates show much reduced blooming, especially in EPDM rubber compounds, even with a loading of up to 5-7PHR. It can also be used to reduce the number &

amount of secondary accelerators used in the EPDM rubber compounds.

Due to its bio-sourced raw materials and higher solubility, Naugard™ Bio XL can help to lower VOC & to reduce smell/odor in automotive EPDM rubber compounds. It increases cure rate without sacrificing scorch safety, therefore, it can be used to increase manufacturing efficiency. The liquid form will also provide improved dispersion and therefore, results in homogeneous curing of the rubber compounds. The key applications include tires, technical rubber goods, under the hood rubber parts, dense & sponge automotive profiles, construction profiles, yoga mats, black & non-black appliance seals, and gaskets. Naugard™ Bio XL is also suitable for the white and colored technical rubber articles.

## Handling Precautions

Avoid all personal contact. OSHA (1910.1200) rating is irritant. Observe good personal hygiene. Keep away from flames and sparks. For more information, please consult SDS.

## Storage and Shelf Life

Four years, when stored in a dry area, in closed containers, away from sources of heat.

## Packaging

The lab samples are available for testing & the commercial product will be available in 190 kg drums.

## Safety and Regulatory Information

For a current Safety Data Sheet (SDS), please contact SI Group, Inc. at [sds.info@siigroup.com](mailto:sds.info@siigroup.com)