



# SAYTEX<sup>®</sup> 8010

## SAFE, EFFECTIVE AND TRUSTED FOR EXCEPTIONAL FIRE SAFETY

Flame retardants play a significant role in helping meet fire safety standards for many of our electronics, appliances, vehicles, homes and more. By reducing the risk of a fire starting or spreading, flame retardants serve as a critical, life-saving line of defense by decreasing flammability and, in many cases, allowing more time to escape in the event of a life-threatening fire.

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### WIDELY STUDIED FLAME RETARDANT, TESTED AND PROVEN

SAYTEX® 8010, a widely studied flame retardant, is proven and suitable in many applications; it is also:

- Safe when used as directed
- Highly stable
- Recyclable

### BACKED BY SCIENCE

A number of positive attributes are acknowledged in studies that validate SAYTEX® 8010 as a safe and effective fire safety solution.

#### NON-HAZARDOUS

Testing has demonstrated that SAYTEX® 8010 is acutely nontoxic, not a skin allergen or irritant, not mutagenic, and does not form brominated dibenzodioxins or dibenzofurans. SAYTEX® 8010's nontoxic profile is compliant with RoHS.

#### ENVIRONMENTAL PERSISTENCE

Based on the lifecycle of SAYTEX® 8010 in product applications, the molecule is not expected to break down in the environment and generate potentially harmful byproducts. In studies, no degradation of SAYTEX® 8010 was observed with either aerobic or anaerobic pathways in a variety of conditions. This is directly related to the chemical stability and physical properties of SAYTEX® 8010.

#### NO BIOACCUMULATION

Studies have verified SAYTEX® 8010 does not bioaccumulate in fish, animals, or plants. This is due to the excellent stability and low solubility of the SAYTEX® 8010 molecule.

#### THERMAL STABILITY

A robust resistance to heat allows for the use of SAYTEX® 8010 in a wide range of polymers, including engineering thermoplastics, which are processed at high temperatures.

#### HYDROLYTIC STABILITY

One major attribute of SAYTEX® 8010 is its low solubility in water, high polarity solvents, and low polarity solvents. This extremely low and virtually undetectable solubility is believed to be a primary reason that SAYTEX® 8010 does not bioaccumulate nor breakdown and enter the environment.

#### UV STABILITY

UV stability is dependent on the actual product formulation and recent research studies showed excellent UV stability in select product formulations. Independent studies mimicking real world conditions have confirmed this, showing that the SAYTEX® 8010 molecule in HIPS did not degrade when exposed to natural sunlight. In addition, for product applications where there is long-term exposure to UV radiation, many different formulations and uses have demonstrated that SAYTEX® 8010 responds very well to UV stabilizers utilized to protect resin systems.

#### RECYCLABILITY

SAYTEX® 8010 has been found to be recyclable through a set of mechanical recycling studies. Through multiple iterations of recycling, SAYTEX® 8010 maintained its properties, including flame retardancy and no degradation. SAYTEX® 8010's stability, which it gets from both its physical and chemical properties, creates a premium product that can be recycled and contribute to the circular economy.

We are confident in these studies and will make them available upon request.



## A CLEAR CHOICE FOR EFFICIENCY AND DEPENDABILITY

SAYTEX® 8010 is the flame retardant of choice when it comes to efficiency. Its high load of bromine atoms results in great flame retardant properties, less required fire retardant loading in the resin, better retention of resin properties and ultimately lower cost. SAYTEX® 8010 also has a lower tendency to bloom, meaning that it stays secured within the resin allowing the resin to maintain its properties over time. Minimizing its impact to the final product's properties, it is a white powder allowing for usage in all finished article colors and is odorless and not volatile.

This science and these attributes combined with strong consideration for human and animal health, the environment and the circular economy make SAYTEX® 8010 the clear choice among flame retardants.

## EVERYDAY FIRE SAFETY VERSATILITY

SAYTEX® 8010 is a well-known commercial product and from years of study and use, has proven to be extremely versatile in several resin systems including styrenics, polyolefins, polyesters, thermosets, and polyamides. These resin systems containing SAYTEX® 8010 flame retardant can be used in a wide range of end-use products such as electronics, appliances, vehicles, circuit boards, construction & insulation and more.

Many everyday items are flammable and create great risk to loved ones and property. SAYTEX® 8010 flame retardant decreases flammability and, in many cases, allows more escape time in the event of a life-threatening fire.

## PEACE OF MIND YOU CAN RELY ON

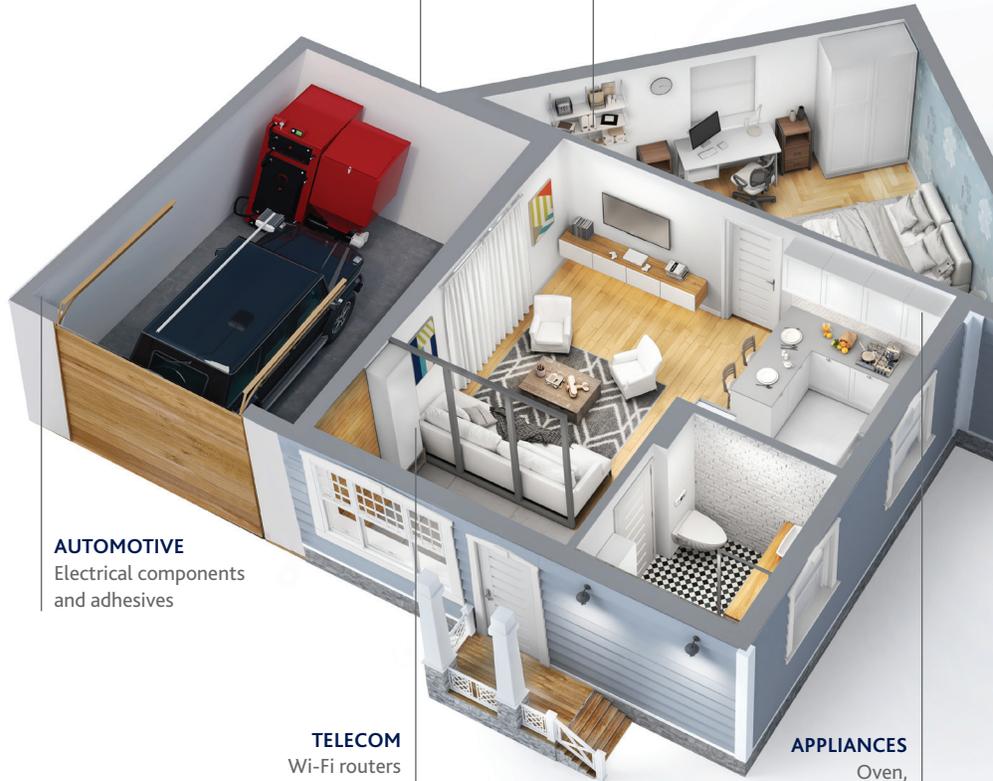
With an eye on performance and the future, our proven SAYTEX® 8010 bromine-based flame retardant provides life-saving properties to everyday products. SAYTEX® 8010 checks all the boxes for fire safety solutions giving you peace of mind.

### BUILDING MATERIALS

Insulation and electrical components

### ELECTRONICS

Computers, tablets, printers, copiers, TVs, etc.



### AUTOMOTIVE

Electrical components and adhesives

### TELECOM

Wi-Fi routers and equipment

### APPLIANCES

Oven, dishwasher, refrigerator, toaster, coffee maker, etc.

## GET TO KNOW ALBEMARLE

and the way we're creating a better tomorrow for the world in which we live. Now and in the future, you can look to Albemarle for exceptional fire safety solutions.

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