Hallstar works collaboratively to deliver next generation solutions for critical automotive applications.

Today’s vehicles are expected to last years longer with fewer repair and maintenance issues. To stay competitive, manufacturers need components that stay durable and flexible while withstanding extreme temperatures, oil and gas exposure and the demands of increasingly sophisticated automotive technology.

Hallstar offers solutions for every area of the car from tires and engines to air bags and floor mats. Our portfolio also includes the leading edge of phthalate replacement technology, which often exceeds performance expectations without environmental impact.

Tailored solutions for critical applications
Hallstar’s ability to continually invent and formulate with esters to solve problems and craft important functionality is based on decades of esterification experience.

We also offer our own molecular design system, the Paraplex Approach, to quickly create unique plasticizer solutions based on tightly defined performance requirements. Together, we can explore new possibilities and create next generation automotive products.
Hallstar works collaboratively to deliver next generation solutions for critical automotive applications.

Today’s vehicles are expected to last years longer with fewer repair and maintenance issues. To stay competitive, manufacturers need components that stay durable and flexible while withstanding extreme temperatures, oil and gas exposure and the demands of increasingly sophisticated automotive technology.

Hallstar offers solutions for every area of the car from tires and engines to air bags and floor mats. Our portfolio also includes the leading edge of phthalate replacement technology, which often exceeds performance expectations without environmental impact.

Tailored solutions for critical applications

Hallstar’s ability to continually invent and formulate with esters to solve problems and craft important functionality is based on decades of esterification experience.

We also offer our own molecular design system, the Paraplex Approach, to quickly create unique plasticizer solutions based on tightly defined performance requirements. Together, we can explore new possibilities and create next generation automotive products.
The interior’s PVC-based parts experience extreme heat and direct sunlight, ultimately leading to windshield fogging from plasticizers that have volatilized and essentially evaporated from the PVC. Our polymeric plasticizers have excellent permanence with minimal volatility. These plasticizers also provide a wide range of operating conditions with improved traction in all conditions while providing low roll resistance.

**TIRES**

The automotive industry is facing more stringent regulations for stopping distance and fuel economy. Tires must meet these demands with improved traction in all conditions while providing low roll resistance.

**Engine**

The demands on automotive engine elastomer components have never been higher. Smaller engines trying to generate more horsepower are operating under elevated temperatures and in harder operating conditions. The need for superior functionality requires high performance ester plasticizers and magnesium oxides. Whether the application requires low and/or high performance usability or transmission resistance to hydrocarbon fluids, Hallstar has an ester plasticizer that will meet or exceed the ever increasing physical property requirements.

### Power Train Brake – HNBR

These belts need to perform under a wide range of temperature conditions over a long operating life.

- **Tajplast® B-91** provides both excellent high and low temperature properties.
- **Paraplex® A-8000** provides low temperature performance and good oil resistance and high compression set.

### Oil Cooler Hose – NBR, HNBR

These hoses must be resistant to various grades of engine oil and operate under a wide range of temperatures.

- **Plasthall® 466** is a polymeric ester with excellent high and low temperature properties.
- **Plasthall® P-670** is a specialty ester that provides both excellent high and low temperature properties.

### Transmission Cooler Hose – AEM/ACM

These type of hoses must carry transmission fluid at a wide range of temperatures and also needs oil/fuel resistance.

- **Tajplast® B-91** provides both excellent high and low temperature properties.
- **Paraplex® A-8000** is a polymeric ester with excellent fluid resistance and permanence.

### Turbocharger – AEM/ACM

Turbochargers operate at high temperatures under severe conditions, but also need low temperature flexibility and good compression set.

- **Tajplast® B-91** provides both excellent high and low temperature properties.
- **Paraplex® A-8000** is a polymeric ester with excellent heat resistance and permanence.

### Power Steering Hose – CPE

Power steering hoses require oil resistance and must operate over a wide temperature range with good heat aging.

- **Tajplast® P-H5** is a specially polymeric that provides both high and low temperature resistance and heat aging.
- **Paraplex® G-42** can be used as a secondary plasticizer to improve heat aged physicals.

### Crankshaft Seal – FKM

These specialized seals require superior performance to last upwards of 150,000 miles. The following provide superior HF abrasion, better cure rates and excellent compression set.

- **Maglite® D**
- **Maglite® G**
- **Maglite® DE**
Seats and Side Door Panels
These interior pieces require long-term flexibility and low-plasticizer migration for minimal fogging and excellent low temperature properties. Our polymeric plasticizers have excellent permanence with minimal volatility. These plasticizers also provide excellent low temperature flexibility.

Dashboard
Dashboard needs low plasticizer migration for minimal fogging as well as migration resistance to polyurethane foam.

Paraplex® A-8225 is a polymeric ester with excellent low temperature flexibility, resistance and excellent low temperature properties.

Air Bag Covers
These covers require low temperature flexibility, resistance to ensure they operate on demand over a wide range of operating conditions with solid longevity.

Power Train

Power Train – Inlet

These belts need to perform under a wide range of temperature conditions, under high heat, under severe operating conditions, but also need low temperature properties.

Turbocharger – AEM/ACM

Turbochargers operate at high temperatures under severe conditions, but also need low temperature properties.

Oil Cooler Hose

These hoses must be resistant to various grades of engine oil and operate under a wide range of temperatures.

Power steering hoses require oil resistance and must operate over a wide temperature range with good heat aging.

Crankshaft Seal

Crankshaft seals are used to prevent oil leakage and must operate over a wide range of temperatures.

Power Steering Hose – AEM/ACM

Power steering hoses require oil resistance and must operate over a wide temperature range with good heat aging.

Crankshaft Seal – FKM

These specialized seals require superior performance to last upwards of 150,000 miles. The following provide superior HST abrasion, faster cure rates and excellent compression set.

Maglite® G (D PU)

Maglite® G SSF

Maglite® DE

Learn more about Hallstar’s plasticizer solutions for the automotive industry at www.hallstar.com.
Seathacks and Side Door Panels

These interior pieces require long-term flexibility and low-plasticizer migration for minimal fogging as well as heat resistance.

Paraplex® A-8000 is a polymeric ester that provides excellent flexibility and permanence with low fogging.

Dashboard

Dashboards need low plasticizer migration for minimal fogging as well as in-molding resistance to polyurethane foam.

Paraplex® A-2625 is a polymeric ester with excellent low fogging characteristics and permanence.

Paraplex® A-2602 is our latest innovative polymeric ester that provides the best low fogging as well as migration resistance and excellent low temperature flexibility.

Air Bag Covers

These covers require excellent low temperature flexibility to ensure they operate on demand or even in a wide range of operating conditions with solid longevity.

Plasthall® CF and DBEES are both excellent choices for this application.

Engine

The demands on automobile engine elastomer components have never been higher. Smaller engines trying to generate more horse power are operating at elevated temperatures and in harsher operating conditions. The need for superior functionality requires high performance ester plasticizers and magnesium oxides. Whether the application requires low and/or high performance usability or extraction resistance to hydrocarbon fluids, Hallstar has an ester plasticizer that will meet or exceed the ever increasing physical property requirements.

Paraplex® A-8000 is a polymeric ester that provides excellent high and low temperature properties.

Paraplex® A-8000 provides excellent ester with excellent fluid resistance and permanence.

Transmission Cooler Hose – AEM/ACM

These hoses must be resistant to various grades of engine oil and operate under a wide range of temperature conditions.

Plasthall® 7050 provides good oil resistance and low temperature properties.

Plasthall® OBEA (226) is a high performance monomeric for low temperature performance.

Paraplex® A-8000 is a polymeric ester with excellent oil resistance and high temperature properties.

Power Train Belt – AEM/ACM

These belts need to perform under a wide range of temperature conditions over a long operating life.

TagMeR® 812 provides both high and low temperature properties.

Plasthall® A-800 provides excellent high and low temperature properties.

Turbocharger – AEM/ACM

Turbochargers operate at high temperatures under severe conditions, but also need low temperature flexibility and good compression set.

TagMeR® 812 provides a wide operating range of both high and low temperature properties.

Paraplex® A-800 is a polymeric ester with excellent fluid resistance and permanence.

Oil Cooler Hose – AEM/ACM

These hoses must be resistant to various grades of engine oil and operate under a wide range of temperature conditions, but also need low temperature properties.

Plasthall® 7050 provides both high and low temperature properties.

Power Steering Hose – AEM/ACM

Power steering hoses require oil resistance and must operate over a wide temperature range with good heat aging.

Paraplex® P-632 is a specialty polymeric that provides both high and low temperature resistance and heat aging.

Paraplex® G-62 can be used as a secondary plasticizer to improve heat aged physicals.

Crankshaft Seal – FKM

These specialized seal require superior performance to last upwards of 150,000 miles. The following provide superior HI abrasion, faster cure rates and excellent compression set.

Maglite® D HK

Maglite® D Sff

Maglite® DE

Tires

The automotive industry is facing more stringent regulations for stopping distance and fuel economy. Tires must meet these demands with improved traction in all conditions while providing low roll resistance.

Tire Tread – SBR/BR

StarTread® A-750 provides the best overall performance for winter and summer traction.

StarTread® A-820 offers the best overall winter traction and low roll resistance.

StarTread® A-920 provides excellent overall winter traction.

StarTread® liquid plasticizers are also available in Dry Liquid Concentrate form.

Power Train Belt – HNBR

These belts need to perform under a wide range of temperature conditions over a long operating life.

TagMeR® 812 provides both high and low temperature properties.

Plasthall® A-800 provides excellent high and low temperature properties.

Paraplex® A-8000 provides excellent high and low temperature properties.

Transmission Cooler Hose – AEM/ACM

This type of hose must contain transmission fluid at a wide range of temperatures and also needs aged oil resistance.

TagMeR® 812 provides low temperature properties.

Plasthall® A-800 provides both high and low temperature properties.

Paraplex® A-8000 is a polymeric ester with excellent fluid resistance and permanence.

Oil Cooler Hose – HNBR

These hoses must be resistant to various grades of engine oil and operate under a wide range of temperature conditions.

Plasthall® 7050 provides good oil resistance and low temperature properties.

Plasthall® OBEA (226) is a high performance monomeric for low temperature performance.

Paraplex® A-8000 is a polymeric ester with excellent oil resistance and high temperature properties.

Transmission Seal – AEM/ACM

These seals operate at high temperatures under severe conditions, but also need low temperature flexibility and good compression set.

TagMeR® 812 provides low temperature properties.

Paraplex® A-800 provides a wide operating range of both high and low temperature properties.

Paraplex® A-800 is a polymeric ester with excellent fluid resistance and permanence.

Crankshaft Seal – FKM

These specialized seal require superior performance to last upwards of 150,000 miles. The following provide superior HI abrasion, faster cure rates and excellent compression set.

Maglite® D HK

Maglite® D Sff

Maglite® DE

Engine

The interior’s PVC-based parts experience extreme heat and direct sunlight, ultimately leading to windshield fogging from plasticizers that have volatilized and essentially evaporated from the PVC. Our polymeric plasticizers have excellent permanence with minimal volatility. These plasticizers also help the interior remain flexible in colder conditions.

Paraplex® G-62 can be used to improve heat aged physicals.

Plasthall® 7050 provides both high and low temperature properties.

Power Steering Hose – CRPR

Power steering hoses require oil resistance and must operate over a wide temperature range with good heat aging.
Hallstar works collaboratively to deliver next generation solutions for critical automotive applications.

Today’s vehicles are expected to last years longer with fewer repair and maintenance issues. To stay competitive, manufacturers need components that stay durable and flexible while withstanding extreme temperatures, oil and gas exposure and the demands of increasingly sophisticated automotive technology.

Hallstar offers solutions for every area of the car from tires and engines to air bags and floor mats. Our portfolio also includes the leading edge of phthalate replacement technology, which often exceeds performance expectations without environmental impact.

Tailored solutions for critical applications

Hallstar’s ability to continually invent and formulate with assets to solve problems and craft important functionality is based on decades of esterification experience.

We also offer our own molecular design system, the Paraplex Approach, to quickly create unique plasticizer solutions based on tightly defined performance requirements. Together, we can explore new possibilities and create next generation automotive products.

Corporate and Executive Offices:
120 South Riverside Plaza, Suite 1620
Chicago, IL 60606 USA

For customer service and general inquiries:
1-877-427-4255
International:
+1-312-385-4494

www.hallstar.com

© Hallstar, All Rights Reserved 8/15