

GASOLINE BLEND STOCKS

(Including C5, C6, and C7 gasoline streams)

Product Stewardship Summary

(CAS number – Various)

What are Gasoline Blend Stocks?

Gasoline blend stocks are complex mixtures, obtained from crude oil in a refinery distillation process, that become part of the gasoline blend pool. These feedstocks are clear liquids with an aromatic odour.

How are Gasoline Blend Stocks Used?

Gasoline Blend Stocks are used in the formulation of motor gasoline.

Health, Safety and Environmental Considerations

Gasoline blend stocks are irritating to the skin and eyes. If vapours are inhaled, irritation to the respiratory tract may be experienced. Single exposure to very high concentrations can cause disorientation, euphoria and unconsciousness. Prolonged moderate exposure can cause toxic effects on the blood and blood-forming organs.

A component of concern that is present in these blend stocks is benzene, which is listed as a human carcinogen by the International Agency for Research on Cancer (IARC). Use and manufacture of gasoline blend stocks might result in the presence of low levels of benzene in the ambient air. Prolonged moderate exposure to benzene has been associated with toxic effects on the blood and blood-forming organs, such as anemia, acute myelogenous leukemia, or myelodysplastic syndrome.

In the work environment, the occupational exposure limit for benzene globally ranges from 0.2 - 1 ppm, with 1 ppm being used across most of the world.

Gasoline blend stocks are extremely flammable and there is a risk of vapour ignition at normal handling temperatures. The vapour is heavier than air and will spread along the ground if released, so care needs to be taken to ensure that the vapour is not ignited by a distant source. It will also float on water and can be ignited on surface water. Electrostatic charges may be generated during handling.

If spilled in water, these materials are toxic to fish, but are very volatile and evaporate rapidly. They are not soluble in water and are not readily biodegradable.

Storing and Transporting Gasoline Blend Stocks

Gasoline Blend Stocks are stored in mild steel or stainless steel and are transported by pipeline to internal customers. This material is flammable and can accumulate static electricity during transfer; therefore, precautions to prevent a static spark must be taken.

Risk Characterization Summary

Risks associated with exposure to this product have been evaluated for the following “chain-of-commerce” activities: manufacture, storage, product transfer, transportation, and customers/markets. Due to health, safety and environmental considerations, it is only manufactured, stored and transported to customers in closed systems. Likewise, customers are limited to those who only use the product in closed systems as an intermediate for the manufacture of other chemicals. Proper equipment design and handling procedures maintain low risk from exposure to the product where the product is used as a chemical intermediate.

This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of health and safety information. Additional information is available through the chemical’s applicable [Safety Data Sheet](#), which should be consulted before use of the chemical. This product stewardship summary does not supplant or replace required regulatory and/or legal communication documents.



Disclaimer

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions that may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

Shell Chemicals

The expression “Shell Chemicals” refers to the companies of the Shell Group of companies that are engaged in the chemical businesses. Each of the companies that make up the Shell Group of companies is an independent entity and has its own separate identity.