alpha-Methylstyrene (AMS)

$C_6H_5CCH_2CH_3$

alpha-Methylstyrene (AMS) is a colorless liquid with a characteristic odor. Georgia Gulf manufactures AMS at our phenol and acetone plants in Plaquemine, Louisiana and Pasadena, Texas.

Properties

Molecular weight	***118.19***
Boiling point, EC	***165***
Melting point, EC	***-22.78***
Flash point (closed cup), EC	**46**
Vapor pressure (mm mercury @ 20 EC)	***1.9***
Specific gravity @ 15.6 EC	***0.92***
Vapor density (air=1)	***4.1***
Solubility in water	***slight***

Uses

AMS is most commonly used as an ABS resin modifier in hydrocarbon resins as well as being an ingredient in waxes and inks.

Handling and Storage

Store AMS in drums or other non-combustible containers. Storage areas should be well-ventilated and equipped with an automatic sprinkler or other adequate extinguishing system. Bulk AMS storage facilities require special design considerations regarding venting, diking and separation distances.

AMS is stable; however, it is combustible and represents a potential fire hazard. Keep AMS away from heat and sources of ignition. Do not allow smoking or open flames in areas where AMS is being used or transported. Use spark resistant tools around lines, drums or other containers containing AMS. Take special care when loading and unloading tank cars and tank trucks.

Do not store acids or oxidizing materials, including hydrogen peroxide and halogens, near AMS. Contact with oxidizing agents may cause fires and explosions. Also, do not allow AMS to come in contact with catalysts for vinyl polymerization and ionic polymerization (i.e., aluminum and iron chloride).

All AMS storage must be electrically bonded and grounded to prevent possible ignition from static sparks. Whenever AMS is stored or handled, install all electrical equipment in accordance with Articles 500 and 501 of the National Electrical Code, Hazardous Locations.

The preferred method of extinguishing AMS fires is with an approved foam. Dry chemicals and carbon dioxide extinguishers can also be used. Water spray may be effective on AMS fires, but a direct stream of water tends to spread the fire and should not be used. However, use a water spray to keep exposed AMS containers cool. Because AMS forms toxic gases and vapors (i.e., carbon monoxide) when it burns, firefighters must wear self-contained breathing equipment.

AMS spills may need to be reported to the National Response Center (800-424-8802). Disposal of spill material should be in compliance with local, state and federal regulations.

Local and federal regulations, as well as insurance codes, must be considered whenever AMS is used or handled. Georgia Gulf recommends that prior to installing AMS storage facilities, you contact all concerned local governmental agencies, i.e., fire department, health department, environmental quality, etc. Local requirements may vary, and any AMS installation should meet the standards of these agencies.

More information on the safe handling of alpha-Methylstyrene is in the Material Safety Data Sheet available from Georgia Gulf.

Shipping

Georgia Gulf ships AMS in ocean going vessels, tank trucks and tank cars from our plants in Pasadena, Texas and Plaquemine, Louisiana.

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IMPORTANT: The technical data herein is believed to be accurate. It is offered for your consideration investigation and verification. Buyer assumes all risk of use, storage and handling of the product.
No warranty, expressed or implied, is made including, but not limited to, implied warranties of merchantability and fitness for a particular purpose.
Nothing contained herein shall be construed as a license to operate under, or recommendation to infringe, any patents.

The Department of Transportation (DOT) regulates the shipment of AMS, and information concerning the placarding and reportable quantity requirements for any quantity of shipment is available from the DOT Materials Transportation Bureau or from Georgia Gulf.

Effective October 1,1993, the proper shipping name for domestic shipments as well as international shipments is Isopropenylbenzene. The Hazard Class is 3 (flammable liquid) with an identification number of UN 2303. The International Maritime Organization (IMO) class is 3.3. Any signs of leaking product during shipping or unloading should be given prompt attention. In case of emergency, contact CHEMTREC at 800-424-9300.

Sales and Service

Competent sales personnel are available to help meet your needs with Georgia Gulf chemicals.