



# Material Safety Data Sheet

## Americas Styrenics LLC

**Product Name:** Styrene Monomer - AS

**Issue Date:** 12/08/2011

**Print Date:** 25 Oct 2012

Americas Styrenics LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. Product and Company Identification

### Product Name

Styrene Monomer - AS

### COMPANY IDENTIFICATION

Americas Styrenics LLC  
Suite 1200  
24 Waterway Avenue  
The Woodlands, TX 77380  
United States

Customer Information Number:

888-552-6789

PSCS@amstyrenics.com

### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:**

800-424-9300

**Local Emergency Contact:**

989-636-4400

## 2. Hazards Identification

### Emergency Overview

**Color:** Colorless

**Physical State:** Liquid.

**Odor:** Sweet

### Hazards of product:

WARNING! Flammable liquid and vapor. Causes eye irritation. May cause skin irritation. May be harmful if inhaled. May cause anesthetic effects. Aspiration hazard. Can enter lungs and cause damage. Vapor explosion hazard. Vapors may travel a long distance; ignition and/or flash back may occur. Isolate area. Keep upwind of spill. Stay out of low areas. Warn public of downwind explosion hazard. Eliminate ignition sources. Suspect cancer hazard. May cause cancer.

### OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential Health Effects**

**Eye Contact:** May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Vapor may cause lacrimation (tears).

**Skin Contact:** Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause drying and flaking of the skin.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

**Inhalation:** Vapor concentrations are attainable which could be hazardous on single exposure. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

**Ingestion:** Very low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Swallowing may result in irritation of the mouth, throat, and gastrointestinal tract.

**Aspiration hazard:** Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

**Effects of Repeated Exposure:** In animals, effects have been reported on the following organs: Central nervous system. Kidney. Liver. Respiratory tract. Lung effects have been observed in mice following repeated exposure to styrene. Styrene is reported to have caused hearing loss in laboratory animals upon exposure to high concentrations (>800 ppm); however, the relevance of this to humans is unknown. Some studies in humans allege that repeated exposure to styrene may result in minor, subclinical decreases in the ability to discriminate between colors.

**Cancer Information:** An increased incidence of lung tumors was observed in mice from an inhalation study on styrene. The relevance of this finding to humans is uncertain since data from mode of action investigations of mouse lung tumors coupled with other long-term animal studies and epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

**Birth Defects/Developmental Effects:** Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

**3. Composition Information**

Component	CAS #	Amount
Styrene	100-42-5	>= 99.9 %

**4. First-aid measures****Description of first aid measures**

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**Skin Contact:** Wash skin with plenty of water.

**Eye Contact:** Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

**Ingestion:** Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

**Most important symptoms and effects, both acute and delayed**

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

**Indication of immediate medical attention and special treatment needed**

Maintain adequate ventilation and oxygenation of the patient. If burn is present, treat as any thermal burn, after decontamination. Because rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Skin contact may aggravate preexisting dermatitis.

**5. Fire Fighting Measures****Suitable extinguishing media**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. General purpose synthetic foams (including AFFF type) or protein foams are preferred if available. Alcohol resistant foams (ATC type) may function.

**Extinguishing Media to Avoid:** Do not use direct water stream. Straight or direct water streams may not be effective to extinguish fire.

**Special hazards arising from the substance or mixture**

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from polymerization. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Electrically ground and bond all equipment. Flammable mixtures of this product are readily ignited even by static discharge. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Flammable mixtures may exist within the vapor space of containers at room temperature. Flammable concentrations of vapor can accumulate at temperatures above flash point; see Section 9. Dense smoke is produced when product burns.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water may not be effective in extinguishing fire. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Do not use direct water stream. May spread fire. Eliminate ignition sources. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Avoid accumulation of water. Product may be carried across water surface spreading fire or contacting an ignition source. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**6. Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas.

Keep upwind of spill. Ventilate area of leak or spill. Refer to Section 7, Handling, for additional precautionary measures. No smoking in area. Vapor explosion hazard. Keep out of sewers. For large spills, warn public of downwind explosion hazard. Check area with combustible gas detector before reentering area. Ground and bond all containers and handling equipment. Eliminate all sources of ignition in vicinity of spill or released vapor to avoid fire or explosion. See Section 10 for more specific information. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Pump with explosion-proof equipment. If available, use foam to smother or suppress. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## 7. Handling and Storage

### Handling

**General Handling:** Keep away from heat, sparks and flame. Avoid contact with eyes, skin, and clothing. Do not swallow. Avoid breathing vapor. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed. No smoking, open flames or sources of ignition in handling and storage area. Electrically bond and ground all containers and equipment before transfer or use of material. Use of non-sparking or explosion-proof equipment may be necessary, depending upon the type of operation. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Never use air pressure for transferring product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Other Precautions:** Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

### Storage

Minimize sources of ignition, such as static build-up, heat, spark or flame. Keep container closed. Maintain inhibitor and dissolved oxygen level. Do not purge containers of this material with nitrogen. Flammable mixtures may exist within the vapor space of containers at room temperature. See Section 10 for more specific information. Do not store in: Copper. Copper alloys. Shelf life is dependent on storage temperature and inhibitor level.

**Shelf life: Use within 3 - 6 Months**

## 8. Exposure Controls / Personal Protection

### Exposure Limits

Component	List	Type	Value
Styrene	ACGIH	TWA	20 ppm BEI
	ACGIH	STEL	40 ppm BEI
	OSHA/Z2	TWA	100 ppm
	OSHA/Z2	Ceiling	200 ppm
	OSHA/Z2	MAX. CONC	600 ppm 5 minutes in any 3 hours

A BEI notation following the exposure guideline refers to a guidance value for assessing biological monitoring results as an indicator of the uptake of a substance from all routes of exposures.

## Personal Protection

**Eye/Face Protection:** Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

**Skin Protection:** When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.

**Hand protection:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Styrene/butadiene rubber. Viton. Examples of acceptable glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply. The following should be effective types of air-purifying respirators: Organic vapor cartridge.

**Ingestion:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

## Engineering Controls

**Ventilation:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

## 9. Physical and Chemical Properties

<b>Appearance</b>	
<b>Physical State</b>	Liquid.
<b>Color</b>	Colorless
<b>Odor</b>	Sweet
<b>Odor Threshold</b>	0.1 ppm <i>Literature</i>
<b>pH</b>	<i>Not applicable</i>
<b>Melting Point</b>	Not applicable to liquids
<b>Freezing Point</b>	-30.6 °C (-23.1 °F) <i>Literature</i>
<b>Boiling Point (760 mmHg)</b>	145 °C (293 °F) <i>Literature.</i>
<b>Flash Point - Closed Cup</b>	31 °C (88 °F) <i>Literature</i>
<b>Evaporation Rate (Butyl Acetate = 1)</b>	< 1 <i>Literature</i>
<b>Flammability (solid, gas)</b>	No
<b>Flammable Limits In Air</b>	<b>Lower:</b> 1.1 %(V) <i>Literature</i> <b>Upper:</b> 6.1 %(V) <i>Literature</i>
<b>Vapor Pressure</b>	0.67 kPa @ 20 °C <i>Literature</i>
<b>Vapor Density (air = 1)</b>	3.6 @ 20 °C <i>Literature</i>
<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	0.91 <i>Literature</i>
<b>Solubility in water (by weight)</b>	0.03 g/l @ 20 °C <i>Literature</i>
<b>Partition coefficient, n-octanol/water (log Pow)</b>	2.95 <i>Measured</i>
<b>Autoignition Temperature</b>	490 °C (914 °F) <i>Literature</i>
<b>Decomposition Temperature</b>	No test data available

<b>Kinematic Viscosity</b>	0.8 cSt @ 20 °C <i>Literature</i>
<b>Liquid Density</b>	0.9050 g/cm <sup>3</sup> @ 20 °C
<b>Molecular Weight</b>	104.14 g/mol
<b>Henry's Law Constant (H)</b>	2.75E-03 atm*m <sup>3</sup> /mole Measured

## 10. Stability and Reactivity

### Reactivity

No dangerous reaction known under conditions of normal use.

### Chemical stability

Stable under recommended storage conditions. See Storage, Section 7.

### Possibility of hazardous reactions

Can occur. Maintain inhibitor and dissolved oxygen level. Do not purge containers of this material with nitrogen. Polymerization can be catalyzed by: Absence of air. Metal salts. Peroxides. Rust. This product is inhibited with: p-Tertiary butylcatechol. Uninhibited monomer vapors can polymerize and plug relief devices.

**Conditions to Avoid:** Avoid temperatures above 30°C (86°F) Exposure to elevated temperatures can cause product to decompose. Avoid static discharge. Do not blanket or purge with an inert gas to avoid depleting the oxygen concentration. Avoid direct sunlight.

**Inhibitor:** 4-tert-Butylcatechol.

**Incompatible Materials:** Avoid contact with oxidizing materials. Avoid contact with: Acids. Caustic potash. Caustic soda. Metal halides. Avoid contact with absorbent materials such as: Cellulose. Clay-based absorbents. Sawdust. Avoid unintended contact with peroxides.

### Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.

## 11. Toxicological Information

### Acute Toxicity

#### Ingestion

LD50, rat 5,000 mg/kg

#### Dermal

The dermal LD50 has not been determined.

#### Inhalation

LC50, 4 h, Vapor, rat 11.8 mg/l

### Eye damage/eye irritation

May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Vapor may cause lacrimation (tears).

### Skin corrosion/irritation

Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage. May cause drying and flaking of the skin.

### Sensitization

#### Skin

No relevant data found.

#### Respiratory

No relevant data found.

### Repeated Dose Toxicity

In animals, effects have been reported on the following organs: Central nervous system. Kidney. Liver. Respiratory tract. Lung effects have been observed in mice following repeated exposure to styrene. Styrene is reported to have caused hearing loss in laboratory animals upon exposure to high

concentrations (>800 ppm); however, the relevance of this to humans is unknown. Some studies in humans allege that repeated exposure to styrene may result in minor, subclinical decreases in the ability to discriminate between colors.

### Chronic Toxicity and Carcinogenicity

An increased incidence of lung tumors was observed in mice from an inhalation study on styrene. The relevance of this finding to humans is uncertain since data from mode of action investigations of mouse lung tumors coupled with other long-term animal studies and epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

### Carcinogenicity Classifications:

Component	List	Classification
Styrene	IARC NTP	Possibly carcinogenic to humans.; 2B Reasonably anticipated to be a human carcinogen.

### Developmental Toxicity

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### Reproductive Toxicity

In animal studies, did not interfere with reproduction.

### Genetic Toxicology

In vitro genetic toxicity studies were inconclusive. Animal genetic toxicity studies were inconclusive

## 12. Ecological Information

### Toxicity

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

### Fish Acute & Prolonged Toxicity

LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 h: 4.1 mg/l

### Aquatic Invertebrate Acute Toxicity

LC50, *Daphnia magna* (Water flea), static test, 48 h, survival: 23 mg/l

EC50, *Daphnia magna* (Water flea), flow-through test, 48 h, immobilization: 4.7 mg/l

### Aquatic Plant Toxicity

ErC50, *Pseudokirchneriella subcapitata* (green algae), static test, Growth rate inhibition, 72 h: 4.9 mg/l

### Toxicity to Soil Dwelling Organisms

LC50, *Eisenia fetida* (earthworms), 14 d: 120 mg/kg

### Persistence and Degradability

Material is ultimately biodegradable (reaches > 70% biodegradation in OECD test(s) for inherent biodegradability). Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Material is expected to be readily biodegradable.

### OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
87 %	28 d	OECD 301F Test	pass

### Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
5.3E-11 cm <sup>3</sup> /s	3.5 h	Estimated.

### Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
34 %	47 %	54 %	

Chemical Oxygen Demand: 2.89 mg/mg

Theoretical Oxygen Demand: 3.08 mg/mg

### Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 2.95 Measured

**Bioconcentration Factor (BCF):** 13.5; Fish; Measured

#### **Mobility in soil**

**Mobility in soil:** Potential for mobility in soil is low (Koc between 500 and 2000).

**Partition coefficient, soil organic carbon/water (Koc):** 520 - 920 Estimated.

**Henry's Law Constant (H):** 2.75E-03 atm\*m3/mole Measured

### **13. Disposal Considerations**

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

### **14. Transport Information**

#### **DOT Non-Bulk**

**Proper Shipping Name:** STYRENE MONOMER, STABILIZED

**Hazard Class:** 3 **ID Number:** UN2055 **Packing Group:** PG III

#### **DOT Bulk**

**Proper Shipping Name:** STYRENE MONOMER, STABILIZED

**Hazard Class:** 3 **ID Number:** UN2055 **Packing Group:** PG III

#### **IMDG**

**Proper Shipping Name:** STYRENE MONOMER, STABILIZED

**Hazard Class:** 3 **ID Number:** UN2055 **Packing Group:** PG III

**EMS Number:** F-E,S-D

**Marine pollutant.:** No

#### **ICAO/IATA**

**Proper Shipping Name:** STYRENE MONOMER, STABILIZED

**Hazard Class:** 3 **ID Number:** UN2055 **Packing Group:** PG III

**Cargo Packing Instruction:** 366

**Passenger Packing Instruction:** 355

**Additional Information**

Reportable quantity: 1,000 lb – STYRENE

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

## 15. Regulatory Information

### OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	Yes
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS #	Amount
Styrene	100-42-5	99.9%

### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
Styrene	100-42-5	99.9%

### Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Component	CAS #	Amount
Benzene	71-43-2	<= 1.0 PPM
Ethylbenzene	100-41-4	<= 0.0085 %

However, please note that there is inadequate evidence of ethylbenzene causing cancer in humans. Ethylbenzene has not been classified as a carcinogen by the International Agency for Research on Cancer (IARC), US Environmental Protection Agency (EPA) or the National Toxicology Program (NTP).

In March 2008, the Office of Environmental Health Hazard Assessment's (OEHHA) Proposition 65 department proposed an NSRL of 54 µg/day (inhalation) for ethylbenzene. The objective of the above warning statement is to comply with the Prop 65 statute.

For guidance on Prop 65 labeling requirements for your products, please refer to the workbook published by the Plastics Packaging Council (PPC) available by calling the Customer Information number found on page 1 of this MSDS.

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Component	CAS #	Amount
Benzene	71-43-2	<= 1.0 PPM

**US. Toxic Substances Control Act**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

**CEPA - Domestic Substances List (DSL)**

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

## 16. Other Information

**Recommended Uses and Restrictions****Identified uses**

For industrial use. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

**Revision**

Identification Number: 1017181 / 1004 / Issue Date 12/08/2011 / Version: 9.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation
Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

*Americas Styrenics LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.*