



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

# MATERIAL SAFETY DATA SHEETS

Manufacturer: PHARMCO-AAPER  
58 Vale Road  
Brookfield, CT 06804  
Phone (203) 740-3471  
Fax (203) 740-3481

1101 Isaac Shelby Drive  
Shelbyville, KY 040065  
Phone (502) 633-0650  
Fax (502) 6330685

Emergency Contact:  
CHEMTREC 1-800-424-9300

\*\*\*\*\*  
PRODUCT IDENTIFICATION  
\*\*\*\*\*

**PRODUCT NAME: ALPHA METHYL STYRENE (AMS)**  
MATERIAL SAFETY DATA SHEET

**1. CHEMICAL PRODUCT INFORMATION**  
PRODUCT NAME: ALPHA METHYL STYRENE

**2. COMPOSITION / INFORMATION ON INGREDIENTS**  
COMPONENT CAS NO. AMOUNT (VOL%)  
ALPHA-METHYL STYRENE  
98-83-9 99.3 - 99.7  
EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIIMITS)  
CAS NO. GOVERNING BODY EXPOSURE LIMITS  
ALPHA-METHYL STYRENE 98-83-9 OSHA C 100 PPM  
ALPHA-METHYL STYRENE 98-83-9 ACGIH STEL 100 PPM  
ALPHA-METHYL STYRENE 98-83-9 ACGIH TWA 50 PPM

**3. HAZARDS IDENTIFICATION**  
EMERGENCY OVERVIEW -----  
WARNING! FLAMMABLE LIQUID AND VAPOR. CAUSES SKIN AND EYE IRRITATION. HIGH VAPOR CONCENTRATIONS MAY CAUSE DIZZINESS.  
HAZARS RATINGS:  
KEY: 0=LEAST, 1=SLIGHT, 2=MODERATE, 3=HIGH, 4=EXTREME  
HEALTH FIRE REACTIVITY PPI  
NFPA 1 2 1  
HMIS 2 2 2 X  
POTENTIAL HEALTH EFFECTS  
PRE-EXISTING MEDICAL CONDITIONS  
The following diseases or disorders may be aggravated by exposure to this Product: available data does not identify any conditions.  
INHALATION  
High concentrations may lead to central nervous system effect (drowsiness, Dizziness, nausea, headaches, paralysis and loss of consciousness). High

Vapor concentrations are irritating to the eyes, nose, throat, and lungs.  
LC50 (mg/l): No data  
LC50 (mg/m3):  
LC50 (ppm): No data  
SKIN  
Causes severe skin irritation  
Draize skin score: No data out of 8.0  
LD50 (mg/kg) No data  
EYES: Can cause severe eye irritation  
INGESTION: Moderately toxic. Irritating to mouth, throat, and stomach.  
LD50 (g/kg): 4.9

#### 4. FIRST AID MEASURES

##### INHALATION

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND CONTINUE TO MONITOR. GET IMMEDIATE MEDICAL ATTENTION.

##### SKIN

IMMEDIATELY FLUSH SKIN WITH PLENY OF WATER. REMOVE CLOTHING. GET MEDICAL ATTENTION IMMEDIATELY. WASH CLOTHING SEPARATELY BEFORE REUSE.

##### EYE

FLUSH EYE WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.

##### INGESTION

DO NOT INDUCE VOMITING! DO NOT GIVE LIQUIDS! GET MEDICAL ATTENTION. IMMEDIATELY

#### 5. FIRE FIGHTING MEASURES

##### EXTINGUISHING MEDIA

WATER SPRAY. ALCOHOL RESISTANT FOAM. DRY CHEMICAL. CARBON DIOXIDE.

##### FIRE FIGHTING INSTRUCTIONS:

Use water spray. Cool tank and container. Wear self-contained breathing Apparatus (SCBA) when fire fighting in a confined space. As in any fire, Wear self-contained breathing apparatus (SCBA) when fire fighting in a Confined space. As in any fire, wear self-contained breathing apparatus Pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

##### FLAMMABLE PROPERTIES

TYPICAL MIN. MAX. TEXT RESULT UNITS METHOD

FLASH 118 F N/A

##### AUTOIGNITION

TEMPERATURE 1066 F N/A

##### LOWER EXPLOSION

LIMIT 1.9 % N/A

##### UPPER EXPLOSION

LIMIT 6.1 % N/A

#### 6. ACCIDENTAL RELEASE MEASURES

PREVENT IGNITION; STOP LEAK AND VENTILATE AREA. CONTAIN SPILLED LIQUID WITH SAND AND EARTH. DO NOT USE CONBUSTIBLE MATERIALS SUCH AS SAWDUST.

USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT AS STATED IN SECTION 8 OF THIS MSDS. USE APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING FOR A LARGE SPILL, LEAK, OR RELEASE. ADVISE THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND APPROPRIATE STATE AGENCIES, IF REQUIRED. US REGULATIONS REQUIRE REPORTING SPILLS OF THIS MATERIAL THAT COULD REACH ANY SURFACE WATERS. THE TOLL FREE NUMBER FOR THE US COAST GUARD NATIONAL RESPONSE CENTER IS (800) 424-8802.

#### 7. HANDLING AND STORAGE

##### HANDLING:

USE ONLY IN A WELL-VENTILATED AREA. GROUND AND BOND CONTAINERS WHEN TRANSFERRING MATERIAL. AVOID BREATHING (DUST, VAPOR, MIST, GAS). AVOID CONTACT WITH EYES. AVOID CONTACT WITH THIS MATERIAL. WASH THOROUGHLY AFTER HANDLING.

##### STORAGE:

KEEP AWAY FROM HEAT, SPARKS AND FLAME. STORE IN A COOL DRY PLACE. KEEP CONTAINER CLOSED WHEN NOT IN USE. CONSULT NFPA AND/OR OSHA CODES FOR ADDITIONAL INFORMATION.

#### 8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONSULT WITH A HEALTH/SAFETY PROFESSIONAL FOR SPECIFIC SELECTION.

##### ENGINEERING CONTROL:

Use with adequate ventilation. Ventilation is normally required when Handling or using this product to keep exposure to airborne contaminants

Below the exposure limit. Use explosion proof ventilation equipment.

**PERSONAL PROTECTION:**

**EYE PROTECTION:**

WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES) AND A FACE SHIELD.

**GLOVES OR HAND PROTECTION:**

PROTECTIVE GLOVES ARE RECOMMENDED TO PROTECT AGAINST CONTACT WITH PRODUCT.

WHEN A MATERIAL IS HEATED, WEAR GLOVES TO PROTECT AGAINST THERMAL BURNS.

THE FOLLOWING MATERIALS ARE ACCEPTABLE FOR USE AS PROTECTIVE CLOTHING;

NATURAL RUBBER; POLYVINYL CHLORIDE (PVC).

**RESPIRATORY PROTECTION**

CONCENTRATION IN AIR DETERMINES THE LEVEL OF RESPIRATORY PROTECTION NEEDED.

USE ONLY NIOSH CERTIFIED RESPIRATORY EQUIPMENT. HALF-MASK AIR PURIFYING

RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE FOR EXPOSURES

TO TEN (10) TIMES THE EXPOSURE LIMIT. FULL-FACE AIR PURIFYING RESPIRATOR

WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE FOR EXPOSURES TO (FIFTY) 50

TIMES THE EXPOSURE LIMIT. EXPOSURE SHOULD NOT EXCEED THE CARTRIDGE LIMIT

OF 1000 PPM. PROTECTION BY AIR PURIFYING RESPIRATORS IS LIMITED.

USE A POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR OR SCBA

FOR EXPOSURES GREATER THAN FIFTY(50) THE EXPOSURE LIMIT. IF EXPOSURE IS ABOVE

THE IDLH (IMMEDIATELY DANGEROUS TO LIFE HEALTH) OR THERE IS THE POSSIBILITY

OF AN UNCONTROLLED RELEASE OR EXPOSURE LEVELS ARE UNKNOWN THEN USE A

POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR WITH ESCAPE

BOTTLE OR SCBA. WEAR NIOSH/MSHA-APPROVED (OR EQUIVALENT) FULL-FACEPIECE

AIRLINE RESPIRATOR IN THE POSITIVE PRESSURE MODE WITH EMERGENCY ESCAPE

PROVISIONS. OTHER WHERE SPLASHING IS POSSIBLE, FULL CHEMICALLY RESISTANT

PROTECTIVE CLOTHING (E.G., ACID SUIT) AND BOOTS ARE REQUIRED. THE FOLLOWING

MATERIALS ARE ACCEPTABLE FOR USE AS PROTECTIVE CLOTHING: NATURAL RUBBER;

FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPED WITH AN EYEWASH

FACILITY AND A SAFETY SHOWER. REMOVE CONTAMINATED CLOTHING AND REWASH BEFORE

REUSE.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL PROPERTY TYPICAL UNITS TEXT RESULTS REFERENCE

Appearance other water white liq.

Boiling Point 329 deg F

Bulk Density lb/gal No data

MELTING POINT -9 deg F

MOLECULAR WEIGHT 118.2 g/mole No data

Octanol/water

Coefficients 2238 other

PH other No data

SPECIFIC GRAVITY 0.91 other

SOLUBILITY IN

WATER 0.043 wt%

ODOR other sharp aromatic

ODOR THRESHOLD other No data

VAPOR PRESSURE 1.9 mm/Hg @20 deg C

VISCOSITY (F) SUS No data

VISCOSITY (C) CsT No data

% VOLATILE 7 wt%

**10. STABILITY AND REACTIVITY**

STABILITY: STABLE.

CONDITIONS TO AVOID: AVOID HEAT, SPARKS AND OPEN FLAME.

INCOMPATIBILITY: STRONG OXIDIZERS. HALOGENS AND HALOGENATED COMPOUNDS;

PEROXIDES.

HAZARDOUS DECOMPOSITION: COMBUSTION MAY PRODUCE CARBON MONOXIDE, CARBON

DIOXIDE AND OTHER ASPHYXIANTS.

HAZARDOUS POLYMERIZATION: WILL POLYMERIZE. STRONG ACIDS MAY CAUSE

POLYMERIZATION AT ROOM TEMPERATURE. PRODUCT EXHIBITS LITTLE TENDENCY TO

POLYMERIZE THERMALLY AT TEMPERATURES UP TO 200 DEG C (392 DEG F)

MAY OCCUR.

**11. ECOLOGICAL INFORMATION**

NO DATA AVAILABLE.

**12 DISPOSAL CONSIDERATIONS**

THIS MATERIAL IS A RCRA HAZARDOUS WASTE. DO NOT FLUSH MATERIAL TO DRAIN OR

STORM SEWER. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

**13. TRANSPORTATION INFORMATION**

GOVERNING BODY MODE PROPER SHIPPING NAME

DOT GROUND ISOPROPENYLBENZENE  
GOVERNING BODY MODE HAZARD CLASS UN/NA NO. LABEL  
DOT GROUND 3 (FLAMMABLE LIQUID) 2303 FLAMMABLE  
LIQUID  
DOT GROUND 3 (FLAMMABLE LIQUID) 2303 MARINE  
POLLUTANT

**14. REGULATORY INFORMATION**

REGULATORY LIST COMPONENT CAS NO.  
ACGIH 2000  
SHORT TERM EXPOSURE LIMITS ALPHA-METHYL STYRENE 98-83-9  
ACGIH 2000  
TIME WEIGHTED AVERAGES ALPHA-METHYL STYRENE 98-83-9  
CANADA  
WHMIS: INGREDIENT DISCLOSURE ALPHA-METHYL STYRENE 98-83-9  
INVENTORY - CANADA  
DOMESTIC SUBSTANCES LIST ALPHA-METHYL STYRENE 98-83-9  
INVENTORY  
EUROPEAN EINECS INVENTORY ALPHA-METHYL STYRENE 98-83-9  
INVENTORY  
JAPAN (ENCS) ALPHA-METHYL STYRENE 98-83-9  
INVENTORY  
KOREA - EXISTING AND EVALUATED ALPHA-METHYL STYRENE 98-83-9  
INVENTORY  
TSCA - SECT.8 (B) INVENTORY ALPHA-METHYL STYRENE 98-83-9  
MASSACHUSETTS RIGHT TO KNOW LIST ALPHA-METHYL STYRENE 98-83-9  
NEW JERSEY - DEPARTMENT OF  
HEALTH RTK LIST ALPHA-METHYL STYRENE 98-83-9  
OSHA - FINAL PELs  
CEILING LIMITS ALPHA-METHYL STYRENE 98-83-9

TITLE III CLASSIFICATION SECTIONS 311, 312:  
ACUTE: YES  
CHRONIC: NO  
FIRE: YES  
REACTIVITY: NO  
SUDDEN RELEASE OF PRESSURE: NO

**15. OTHER INFORMATION**

WHMIS CLASSIFICATION: CLASS B DIVISION 3 - COMBUSTIBLE LIQUIDS.  
CLASS D DIVISION 2 SUBDIVISION B - TOXIC MATERIAL

**16. Disclaimer:**

The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.