



## MATERIAL SAFETY DATA SHEET

MSDS No. 03258000  
ENGLISH

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**1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** AMOCO SILVER® LEAD-FREE GASOLINE**MANUFACTURER/SUPPLIER:**Amoco Oil Company  
200 East Randolph Drive  
Chicago, Illinois 60601 U.S.A.**EMERGENCY HEALTH INFORMATION:**

1 (800) 447-8735

**EMERGENCY SPILL INFORMATION:**

1 (800) 424-9300 CHEMTREC (USA)

**OTHER PRODUCT SAFETY INFORMATION:**

(312) 856-3907

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**2.0 COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS#</u>	<u>Range % by Wt.</u>
Gasoline	8006-61-9	85-100
Benzene	71-43-2	1-4
Butane	106-97-8	1-12
Cyclohexane	110-82-7	1-5
Ethylbenzene	100-41-4	1-2
Heptane	142-82-5	1-2
Hexane	110-54-3	1-5
Pentane	109-66-0	1-10
Toluene	108-88-3	1-22
Trimethylbenzene	25551-13-7	1-5
Xylene	1330-20-7	1-10
Methyl tertiary butyl ether (MTBE)	1634-04-4	0-15

(See Section 8.0, "Exposure Controls/Personal Protection", for exposure guidelines)

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### 3.0 HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Danger! Extremely flammable. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea. Harmful if swallowed and/or aspirated into lungs. Can produce skin irritation on prolonged or repeated contact. Use as motor fuel only. Long-term exposure to vapors has caused cancer in laboratory animals.

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:** High concentrations of vapor/mist may cause eye discomfort.

**SKIN CONTACT:** Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

**INHALATION:** Can be harmful if high concentrations are inhaled. High vapor concentrations can cause headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness. See "Toxicological Information" section (Section 11.0).

**INGESTION:** Harmful or fatal if liquid is aspirated into lungs.

**HMIS CODE:** (Health:1) (Flammability:3) (Reactivity:0) CHRONIC HEALTH HAZARD

**NFPA CODE:** (Health:1) (Flammability:3) (Reactivity:0) CHRONIC HEALTH HAZARD.

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### 4.0 FIRST AID MEASURES

**EYE:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**SKIN:** Wash exposed skin with soap and water. Remove contaminated clothing, including shoes, and thoroughly clean and dry before reuse. Get medical attention if irritation develops.

**INHALATION:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get medical attention.

**INGESTION:** If swallowed, do NOT induce vomiting. Get immediate medical attention.

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## 5.0 FIRE FIGHTING MEASURES

**FLASHPOINT:** -45°F

**UEL:** 7.6%

**LEL:** 1.3%

**AUTOIGNITION TEMPERATURE:** 495.0°F

**FLAMMABILITY CLASSIFICATION:** Extremely Flammable Liquid.

**EXTINGUISHING MEDIA:** Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Extremely flammable vapor/air mixtures form. Extinguishment of fire before source of vapor is shut off can create an explosive mixture in air.

**FIRE-FIGHTING EQUIPMENT:** Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

**PRECAUTIONS:** Keep away from sources of ignition (e.g., heat and open flames). Keep container closed. Use with adequate ventilation.

**HAZARDOUS COMBUSTION PRODUCTS:** Burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

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## 6.0 ACCIDENTAL RELEASE MEASURES

Remove or shut off all sources of ignition. Wear respirator and spray with water to disperse vapors. Increase ventilation if possible. Remove mechanically or contain on an absorbent material such as dry sand or earth. Keep out of sewers and waterways.

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## 7.0 HANDLING AND STORAGE

**HANDLING:** Use with adequate ventilation. Ground and bond containers when transferring materials. Wash thoroughly after handling.

**STORAGE:** Store in flammable liquids storage area. Keep container closed. Store away from heat, ignition sources, and open flame in accordance with applicable regulations.

**SPECIAL PRECAUTIONS:** Keep out of sewers and waterways. Avoid strong oxidizers. Report spills to appropriate authorities. **USE AS MOTOR FUEL ONLY.**



## 8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

**EYE:** None required; however, use of eye protection is good industrial practice.

**SKIN:** Avoid prolonged or repeated skin contact. Wear protective clothing and gloves if prolonged or repeated contact is likely.

**INHALATION:** Use with adequate ventilation. Avoid breathing vapor and/or mist. If ventilation is inadequate, use NIOSH/MSHA certified respirator that will protect against organic vapor and dust/mist.

**ENGINEERING CONTROLS:** Control airborne concentrations below the exposure guidelines.

### EXPOSURE GUIDELINES:

<u>Component</u>	<u>CAS#</u>	<u>Exposure Limits</u>
Gasoline	8006-61-9	OSHA PEL: 300 ppm (1989); Not established. (1971) OSHA STEL: 500 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 300 ppm ACGIH TLV-STEL: 500 ppm
Benzene	71-43-2	OSHA PEL: 1 ppm OSHA STEL: 5 ppm ACGIH TLV-TWA: 10 ppm
Butane	106-97-8	OSHA PEL: 800 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 800 ppm
Cyclohexane	110-82-7	OSHA PEL: 300 ppm (1989)(1971) ACGIH TLV-TWA: 300 ppm
Ethylbenzene	100-41-4	OSHA PEL: 100 ppm (1989)(1971) OSHA STEL: 125 ppm(1989); Not established. (1971) ACGIH TLV-TWA: 100 ppm ACGIH TLV-STEL: 125 ppm
Heptane	142-82-5	OSHA PEL: 400 ppm (1989); 500 ppm (1971) OSHA STEL: 500 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 400 ppm ACGIH TLV-STEL: 500 ppm
Hexane	110-54-3	OSHA PEL: 50 ppm (1989); 500 ppm (1971) ACGIH TLV-TWA: 50 ppm
Pentane	109-66-0	OSHA PEL: 600 ppm (1989); 1000 ppm (1971) OSHA STEL: 750 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 600 ppm ACGIH TLV-STEL: 750 ppm
Toluene	108-88-3	OSHA PEL: 100 ppm (1989); 200 ppm (1971) OSHA STEL: 150 ppm (1989); Not established. (1971) OSHA Ceiling: 300 ppm (1971) ACGIH TLV-TWA: 50 ppm (skin)

## EXPOSURE GUIDELINES:

Trimethylbenzene	25551-13-7	OSHA PEL: 25 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 25 ppm
Xylene	1330-20-7	OSHA PEL: 100 ppm (1989)(1971) OSHA STEL: 150 ppm (1989); Not established. (1971) ACGIH TLV-TWA: 100 ppm ACGIH TLV-STEL: 150 ppm
Methyl tertiary butyl ether (MTBE)	1634-04-4	ACGIH TLV-TWA: 40 ppm

## 9.0 CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR:	Clear. Liquid. Hydrocarbon odor.
pH:	Not determined.
VAPOR PRESSURE:	7-15 lb RVP (ASTM D323)
VAPOR DENSITY:	3.0-4.0
BOILING POINT:	80.0-430.0°F (range)
MELTING POINT:	Not determined.
SOLUBILITY IN WATER:	Negligible, below 0.1%.
SPECIFIC GRAVITY (WATER = 1):	0.75

## 10.0 STABILITY AND REACTIVITY

**STABILITY:** Burning can be started easily.

**CONDITIONS TO AVOID:** Keep away from ignition sources (e.g. heat, sparks, and open flames).

**MATERIALS TO AVOID:** Avoid chlorine, fluorine, and other strong oxidizers.

**HAZARDOUS DECOMPOSITION:** None identified.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11.0 TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY DATA:

**EYE IRRITATION:** Primary eye irritation score 0.0/110.0 (rabbits).

**SKIN IRRITATION:** Primary dermal irritation score 1.1/8.0 (rabbits). Acute dermal LD50 greater than 5ml/kg (rabbits). Practically nontoxic for acute exposures by this route.

**DERMAL LD50:** Testing not conducted. See Other Toxicity Data.

**ORAL LD50:** Acute oral LD50 18.8ml/kg (rats). Practically nontoxic for acute exposures by this route.

**INHALATION LC50:** Acute LC50 20.7mg/l (rats).

#### OTHER TOXICITY DATA:

Excessive exposure to vapors may produce headaches, dizziness, nausea, drowsiness, irritation of eyes, nose and throat and central nervous system depression.

In a long-term inhalation study of whole unleaded gasoline vapors, exposure-related kidney damage and kidney tumors were observed in male rats. Similar kidney effects were not seen in female rats or in mice. At the highest exposure level (2056 ppm), female mice had an increased incidence of liver tumors. Results from subsequent scientific studies suggest that the kidney damage and probably the kidney tumor response are unique to the male rat. The significance of the mouse liver tumor response in terms of human health is questionable.

Inhalation of whole unleaded gasoline vapors did not produce birth defects in laboratory animals.

Gasoline is a complex mixture of hydrocarbons and contains benzene (up to 4 volume %), toluene and xylene. Chronic exposure to high levels of benzene has been shown to cause cancer (leukemia) in humans and other adverse blood effects (anemia). Benzene is considered a human carcinogen by IARC, NTP and OSHA. Overexposure to xylene and toluene can cause irritation to the upper respiratory tract, headache and narcosis. Some liver damage and lung inflammation were seen in chronic studies on xylene in guinea pigs but not in rats.

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product.

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#### 12.0 ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

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#### 13.0 DISPOSAL INFORMATION

Residues and spilled material are hazardous waste due to ignitability. Disposal must be in accordance with applicable federal, state, or local regulations. Enclosed-controlled incineration is recommended unless directed otherwise by applicable ordinances.



## 14.0 TRANSPORTATION INFORMATION

### U.S. DEPT OF TRANSPORTATION

Shipping Name : Gasoline  
Hazard Class : 3  
Identification Number : UN1203  
Packing Group : II

### INTERNATIONAL INFORMATION:

Sea (IMO/IMDG)  
Shipping Name : Not determined.

Air (ICAO/IATA)  
Shipping Name : Not determined.

European Road/Rail (ADR/RID)  
Shipping Name : Not determined.

Canadian Transportation of Dangerous Goods  
Shipping Name : Not determined.

## 15.0 REGULATORY INFORMATION

**CERCLA SECTIONS 102A/103 HAZARDOUS SUBSTANCES (40 CFR PART 302.4):** This product is exempt from the CERCLA reporting requirements under 40 CFR Part 302.4. However, if spilled into waters of the United States, it may be reportable under 33 CFR Part 153 if it produces a sheen.

**SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR PART 355):** This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

**SARA TITLE III SECTIONS 311/312 HAZARDOUS CATEGORIZATION (40 CFR PART 370):** This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d).

**SARA TITLE III SECTION 313 (40 CFR PART 372):** This product contains the following substance(s), which is on the Toxic Chemicals List in 40 CFR Part 372:

Component/CAS Number	Weight Percent
Benzene 71-43-2	4
Cyclohexane 110-82-7	5
Ethylbenzene 100-41-4	2
Xylene 1330-20-7	10
Methyl tertiary butyl ether (MTBE) 1634-04-4	15
Hexane 110-54-3	5
Toluene 108-88-3	22

**U.S. INVENTORY (TSCA):** Listed on inventory.

**OSHA HAZARD COMMUNICATION STANDARD:** Flammable liquid. Irritant. Contains components listed by ACGIH. Contains components listed by OSHA. Contains a carcinogenic component.

EC INVENTORY (EII ECS/ELINCS): Not determined.

JAPAN INVENTORY (MITI): Not determined.

AUSTRALIA INVENTORY (AICS): Not determined.

KOREA INVENTORY (ECL): Not determined.

CANADA INVENTORY (DSL): Not determined.

PHILIPPINE INVENTORY (PICCS): Not determined.

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#### 16.0 OTHER INFORMATION

BY:



Donald M. Barker, Director  
Product Stewardship & Toxicology

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*This material Safety Data Sheet conforms to the requirements of ANSI Z400.1.*

*This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.*