



# Material Safety Data Sheet for Armco Products

Manufacturing Facility, Company, or Subsidiary: Construction Products Division  
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Date of Preparation: October 1, 1985 SSF  
Product Name or Number: Armco ABS Pipe Cement

## SECTION I — COMPONENT DATA:

Chemical Components	C.A.S. Number	% Wt.
ABS (Acrylonitrile-Butadiene Styrene) Plastic Resin	9003-56-9	15-25
Methyl Ethyl Ketone (MEK)	78-93-3	75-85

## SECTION II — PHYSICAL DATA:

Bolling Point (°F): 175 °F<sup>1</sup>  
Vapor Density (Air = 1): 2.5<sup>1</sup>  
Specific Gravity (H<sub>2</sub>O = 1): 0.860  
Evaporative Rate (Ethyl Ether = 1): 5.7<sup>1</sup>  
Vapor Pressure (mmHg @ 20°C): 71 mm<sup>1</sup>  
Solubility in Water: 27%<sup>1</sup>  
Percent Volatile By Volume: 85-90%<sup>1</sup>  
pH Information: N/A

Appearance and Odor: Black opaque, medium syrupy liquid, acetone-like odor  
<sup>1</sup>Properties of the MEK solvent

## SECTION III — FIRE & EXPLOSION HAZARD DATA:

Flash Point (°F): 20 °F  
Flammability Limits (%/Vol): LEL: 1.8%<sup>1</sup>  
Auto-Ignition Temperature (°F): 960 °F<sup>1</sup>  
Method Used: T.C.C.  
UEL: 10.0%<sup>1</sup>  
Extinguishing Media: Alcohol foam, CO<sub>2</sub>, dry chemical

Special Fire-Fighting Instructions: Wear self-contained breathing apparatus when fighting fire in confined spaces.

Unusual Fire and Explosion Hazards: Vapor may travel along ground to an ignition source.  
<sup>1</sup>Properties of the MEK solvent

## SECTION IV — REACTIVITY DATA:

Stability (conditions to avoid): Stable. Avoid sources of ignition.  
Incompatibility (materials to avoid): Strong oxidants, caustics, amines, alkonolamines, aldehydes and ammonia will dissolve some plastics.  
Hazardous Decomposition Products: CO, CO<sub>2</sub>, mixed unknown hydrocarbons.  
Hazardous Polymerization: Will not occur.

## SECTION V — HEALTH HAZARD DATA:

Primary Route(s) of Entry: Inhalation, skin contact, eye contact.

Effects of Exposure: Note: To Armco's knowledge, this mixture has not been tested as a whole to determine whether the mixture is a health hazard. The information provided as follows under Inhalation, Skin Contact, Eye Contact, and Ingestion represents the health hazards of the individual chemical components. The following effects of exposure would be expected to be possibly caused by the actual mixture: dizziness, headaches, and nausea from vapor; skin and eye irritation and redness from the liquid.

### Inhalation:

MEK vapor may cause irritation of the eyes, nose, throat and mucous membranes. May cause headaches, dizziness, nausea, numbness in fingers, arms, and legs; vomiting; and unconsciousness. Long-term exposure symptoms may include certain nervous disorders characterized by weakness, fatigue, heaviness in chest and numbness of hands and feet. These symptoms may develop after one year of exposure to vapor concentrations of 50-200 ppm. No effects reported from ABS plastic resin.

### Skin Contact:

Contact with MEK liquid or MEK vapors at concentrations of 300-600 ppm may cause dryness, dermatitis and severe irritation. Liquid is readily absorbed and may cause numbing of fingers and arms. ABS plastic resin may cause irritation.

### Eye Contact:

MEK vapor may cause irritation at 200 ppm. MEK liquid may cause redness and irritation. ABS plastic resin may cause irritation.

**Ingestion:**

MEK liquid may cause irritation of the mouth, throat, and stomach, the severity of which will be dependent upon the amount swallowed. Symptoms of poisoning may include nausea, vomiting, stomach pain and diarrhea. Death can occur from ingestion of as little as 1 ounce. No effects reported from ABS plastic resin.

**Exposure Limits:**

Chemical Components	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )	NTP Listed	IARC Listed
ABS plastic resin	None	None	No	No
Methyl Ethyl Ketone	590	590	No	No

**SECTION VI — EMERGENCY & FIRST-AID PROCEDURES:**

**Inhalation:** In case of overexposure, immediately move person from contaminated area to fresh air. Give artificial respiration if breathing has stopped, or oxygen, if necessary. Seek medical attention, if necessary.

**Skin:** If irritation develops, remove contaminated clothing immediately, and wash contaminated skin with soap or mild detergent and water for five minutes. If irritation persists, seek medical attention.

**Eyes:** In case of contact, immediately wash eyes with large amounts of water for fifteen minutes, occasionally lifting the lower and upper lids. Seek medical attention, if necessary.

**Ingestion:** Seek medical attention, if necessary.

**SECTION VII — SPECIAL HANDLING INFORMATION:**

**Ventilation:** Ventilation, as described in the *Industrial Ventilation Manual* produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other local, state, and federal regulations.

**Respiratory Protection:** A properly fitted, NIOSH-approved, dust-fume respirator should be worn during welding or burning whenever welding fumes exceed the threshold limit value (TLV) or other recommended limits, in accordance with the OSHA Respiratory Protection Standard (29 CFR 1910.134).

**Protective Clothing:** Impervious protective clothing, such as rubber gloves, apron, and boots, should be worn if direct contact is likely.

**Eye Protection:** Chemical-type goggles should be worn whenever splashing, spraying, or other eye contact is likely.

**SECTION VIII — SPILL, LEAK & DISPOSAL PROCEDURES:**

**Action to Take for Spills (use appropriate safety equipment):** Eliminate ignition sources, flames, pilot light, electrical sparks. Provide ventilation. Prevent liquid from entering sewers, waterways, or low areas. Contain spilled liquid with vermiculite, sand, earth, or any other absorbent. Scoop up and store in a suitable container.

**Waste Disposal Method:** Dispose in accordance with the Resource Conservation and Recovery Act (RCRA), state and local regulations.

**SECTION IX — SPECIAL PRECAUTIONS/ADDITIONAL INFORMATION:**

**Precautions to be Taken in Handling and Storage:** All handling equipment should be electrically grounded.

**DOT Information:**

Hazardous Material Proper Shipping Name: Methyl Ethyl Ketone

Hazard Class: Flammable Liquid

Identification Number: UN 1183

EPA Hazardous Waste Number: U159

Additional Information: None

While the information and recommendations set forth on this data sheet are believed to be accurate as of the present date, Armco makes no warranty with respect thereto and disclaims all liability from reliance thereon.