

# MATERIAL SAFETY DATA SHEET

## Bulldog Aerosol Adhesion Promoter

Page: 1  
 Printed: 02/11/2008  
 Revision: 02/08/2008  
 Supersedes Revision: 01/25/2008

### 1. Product and Company Identification

**Product Code:** A5000.4  
**Product Name:** Bulldog Aerosol Adhesion Promoter  
**Reference #:** A5000.4  
**Manufacturer Information**  
**Company Name:** W. M. Barr  
 2105 Channel Avenue  
 Memphis, TN 38113  
**Phone Number:** (901)775-0100  
**Emergency Contact:** 3E 24 Hour Emergency Contact (800)451-8346  
**Information:** W.M. Barr Customer Service (800)398-3892  
**Web site address:** www.wmbarr.com  
**Preparer Name:** W.M. Barr EHS Dept (901)775-0100  
**Synonyms**  
 ETPO123, ETPO123B

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	OSHA TWA	ACGIH TWA	Other Limits
1. Toluene {Benzene, Methyl-; Toluol}	108-88-3	25.0 -50.0 %	200 ppm	50 ppm	No data.
2. Styrene {Phenylethylene; Vinyl benzine; Styrol}	100-42-5	1.0 -10.0 %	100 ppm	20 ppm	No data.
3. Proprietary Resin	NA	1.0 -15.0 %	No data.	No data.	No data.
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	1.0 -10.0 %	No data.	100 ppm	No data.
5. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	1.0 -10.0 %	100 ppm	100 ppm	No data.
6. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	1.0 -15.0 %	No data.	100 ppm	No data.
7. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	1.0 -10.0 %	100 ppm	100 ppm	No data.
8. Proprietary Resin	NA	1.0 -10.0 %	No data.	10 ppm	No data.
9. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	10.0 -20.0 %	200 ppm	200 ppm	No data.
10. Butyl acetate {Acetic acid, Butyl ester}	123-86-4	10.0 -15.0 %	150 ppm	150 ppm	No data.
11. Ethylene glycol monobutyl ether acetate {(a glycol ether)}	112-07-2	< 5.0 %	No data.	20 ppm	No data.
12. Proprietary Resin	NA	1.0 -10.0 %	No data.	No data.	No data.
13. Methyl ether {Dimethyl ether}	115-10-6	30.0 %	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. Toluene {Benzene, Methyl-; Toluol}	108-88-3	500 ppm/(10min)	300 ppm	No data.	No data.
2. Styrene {Phenylethylene; Vinyl benzine; Styrol}	100-42-5	600 ppm/(5min/3hr)	200 ppm	40 ppm	No data.
3. Proprietary Resin	NA	No data.	No data.	No data.	No data.
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	No data.	No data.	150 ppm	No data.
5. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	No data.	No data.	150 ppm	No data.
6. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	No data.	No data.	150 ppm	No data.
7. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No data.	No data.	125 ppm	No data.
8. Proprietary Resin	NA	No data.	No data.	No data.	No data.
9. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	No data.	No data.	300 ppm	No data.
10. Butyl acetate {Acetic acid, Butyl ester}	123-86-4	No data.	No data.	200 ppm	No data.
11. Ethylene glycol monobutyl ether acetate {(a glycol ether)}	112-07-2	No data.	No data.	No data.	No data.
12. Proprietary Resin	NA	No data.	No data.	No data.	No data.
13. Methyl ether {Dimethyl ether}	115-10-6	No data.	No data.	No data.	No data.

### 3. Hazards Identification

#### Emergency Overview

Danger! Flammable. Harmful or fatal if swallowed. Vapor Harmful. Skin and Eye Irritant.

#### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

#### Potential Health Effects (Acute and Chronic)

##### INHALATION ACUTE EXPOSURE EFFECTS:

Vapor Harmful. May cause dizziness, headache, irritation of the upper respiratory tract and lungs, irritation and injury to mucous membranes, watering of the eyes, weakness, drowsiness, nausea, loss of coordination, numbness in fingers, arms and legs, depression of the central nervous system, pulmonary edema, shortness of breath, loss of appetite, fatigue, stupor, anesthesia, narcosis, vomiting, lightheadedness, liver and kidney injury, insensibility and other central nervous system effects, blood disorders, nose tumors, brain damage, giddiness, olfactory changes, confusion, hearing impairment, slurred speech, coughing, hallucinations, irregular heartbeat, unconsciousness, coma, and death. Intentional misuse of this product by deliberately concentrating and inhaling vapors can be harmful or fatal.

##### SKIN CONTACT ACUTE EXPOSURE EFFECTS:

This product is a skin irritant. Product may be absorbed through the skin. May cause irritation, drying and cracking of the skin, defatting of the skin, dermatitis, itching, redness, swelling, tissue damage, inflammation, numbness in fingers and arms, discomfort or pain, erythema. May be absorbed readily to produce symptoms similar to those listed under ingestion.

##### EYE CONTACT ACUTE EXPOSURE EFFECTS:

This material is an eye irritant. May cause redness, tearing, corneal clouding, discomfort or pain with excessive blinking and tear production, excess redness and possible slight swelling of the conjunctiva, stinging, conjunctivitis, visual intolerance to light. If not promptly removed, will injure eye tissue, which may result in permanent damage.

##### INGESTION ACUTE EXPOSURE EFFECTS:

Harmful or fatal if swallowed. May cause dizziness, headache, drowsiness, nausea, weakness, loss of coordination, irritation to mouth, throat and stomach, vomiting, gastrointestinal irritation, diarrhea, loss of appetite, pain and discomfort, cough and hoarseness, salivation, changes in white blood cells, burning sensation in mouth and stomach, unconsciousness and coma. Ingestion of significant quantities may result in red blood cell hemolysis. Liquid aspirated into lungs can cause chemical pneumonitis, which can be fatal.

##### CHRONIC EXPOSURE EFFECTS:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Prolonged skin contact may result in absorption of a harmful amount of this material. Prolonged or repeated contact may cause dermatitis. May cause dizziness, headaches, weakness, eye irritation, drying and cracking of the skin, dermatitis, fatigue, nausea, numbness in the hands and feet, permanent central nervous system changes, some loss of memory, liver and kidney damage, blood disorders, thyroid effects, enlarged liver, and irritation to the respiratory tract. Prolonged or repeated contact may cause skin irritation, even a burn. Prolonged exposure may cause slight swelling of the conjunctiva, blurring of vision may occur. Prolonged skin contact may cause mild to moderate redness and swelling.

#### Signs and Symptoms Of Exposure

Primary Routes of Exposure: Inhalation, Skin Contact

#### Medical Conditions Generally Aggravated By Exposure

Diseases of the skin, liver, kidneys, cardiovascular system, and central nervous system.

## 4. First Aid Measures

### Emergency and First Aid Procedures

#### INHALATION:

If user experiences breathing difficulty, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### SKIN CONTACT:

Wash with soap and water. Get medical attention if irritation develops or persists.

#### EYE CONTACT:

Immediately flush eyes with water for at least 15 minutes. Remove contact lenses if worn. Seek medical attention.

#### INGESTION:

If swallowed, do NOT induce vomiting. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

## 5. Fire Fighting Measures

### Flammability Classification:

LEVEL 3 AEROSOL

### Flash Pt:

39.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)

### Explosive Limits:

LEL: No data.

UEL: No data.

### Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.

### Flammable Properties and Hazards

CPSC FLAMMABILITY: Flammable Aerosol

Flashpoint of dimethyl ether: -42 F (SCC)

Flashpoint of liquid product: 39 F (SCC)

Danger! Flammable! Keep away from heat, sparks, flame, and all other sources of ignition. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition during use and until all vapors are gone. Beware of static electricity that may be generated by synthetic clothing and other sources. Vapors can travel to a source of ignition and flash back.

### Hazardous Combustion Products

Carbon monoxide and carbon dioxide. Irritating or toxic vapors and gases.

### Extinguishing Media

Use carbon dioxide, dry powder, or foam.

### Unsuitable Extinguishing Media

No data available.

## 6. Accidental Release Measures

### Steps To Be Taken In Case Material Is Released Or Spilled

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Wear appropriate personal protective equipment.

Small Spills: take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large Spills: dike far ahead of spill for later disposal.

## 7. Handling and Storage

### Precautions To Be Taken in Handling

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

### Precautions To Be Taken in Storing

Store in a cool dry place. Avoid extreme high or low temperatures.

## 8. Exposure Controls/Personal Protection

### Respiratory Equipment (Specify Type)

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic vapors. A dust mask does not provide protection against vapors.

### Eye Protection

Safety glasses, chemical goggles, or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals.

### Protective Gloves

Wear impermeable gloves. Gloves contaminated with product should be discarded.

### Other Protective Clothing

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

### Engineering Controls (Ventilation etc.)

Use only with adequate ventilation to prevent the buildup of vapors. Do not use in areas where vapors can accumulate and concentrate. Whenever possible, use outdoors in an open air area. If using indoors, open all windows and doors and maintain a cross ventilation of moving fresh air across the work area away from the individual. If strong odor is noticed or you experience slight dizziness, headache, nausea, or other signs of inhalation exposure, STOP. The ventilation is inadequate. Leave the area immediately.

For OSHA controlled workplaces, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Work/Hygienic/Maintenance Practices

A source of clean water should be available in the work area for flushing of the eyes and skin. Wash hands thoroughly after use. Do not eat, drink, or smoke in the work area. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

# MATERIAL SAFETY DATA SHEET

## Bulldog Aerosol Adhesion Promoter

Page: 5

Printed: 02/11/2008

Revision: 02/08/2008

Supersedes Revision: 01/25/2008

### 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	39.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Specific Gravity (Water = 1):</b>	0.895 - 0.905
<b>Bulk density:</b>	7.49 LB/GL
<b>Vapor Pressure (vs. Air or mm Hg):</b>	<=31 MM HG at 20.0 C
<b>Vapor Density (vs. Air = 1):</b>	> 1
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	~ 1
<b>Solubility in Water:</b>	No data.
<b>Percent Volatile:</b>	90.6 % by weight.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	No data.

#### Appearance and Odor

Hazy, Light Yellow

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

#### Conditions To Avoid - Instability

No data available.

#### Incompatibility - Materials To Avoid

Incompatible with strong oxidizing agents, strong caustics, acids, strong bases, hydrogen peroxide, nitric acid, nitrates, sulfuric acid, amines, chemically active metals, salts, aldehydes, ammonia, and halogens.

#### Hazardous Decomposition Or Byproducts

Thermal decomposition may produce carbon monoxide, carbon dioxide, acrylic monomers, acrid smoke and fumes.

**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]

#### Conditions To Avoid - Hazardous Polymerization

No data available.

### 11. Toxicological Information

No data available.

#### Carcinogenicity/Other Information

-Ethyl Benzene (CAS 100-41-4) is on the IARC list as a Group 2B: Possibly Carcinogenic to Humans.

-Styrene (CAS 100-42-5) is on the IARC list as a Group 2B: Possibly Carcinogenic to Humans.

-Toluene (CAS 108-88-3) is on the IARC list as a Group 3: Not Classifiable as to Carcinogenicity in Humans.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Toluene {Benzene, Methyl-; Toluol}	108-88-3	No	3	A4	No
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	No	2B	A4	No
3. Proprietary Resin	NA	n.a.	n.a.	n.a.	n.a.
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	n.a.	n.a.	A4	n.a.

# MATERIAL SAFETY DATA SHEET

## Bulldog Aerosol Adhesion Promoter

Page: 6  
 Printed: 02/11/2008  
 Revision: 02/08/2008  
 Supersedes Revision: 01/25/2008

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
5. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	n.a.	n.a.	A4	n.a.
6. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	n.a.	n.a.	A4	n.a.
7. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	2B	A3	No
8. Proprietary Resin	NA	n.a.	n.a.	n.a.	n.a.
9. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	n.a.	n.a.	n.a.	n.a.
10. Butyl acetate {Acetic acid, Butyl ester}	123-86-4	n.a.	n.a.	n.a.	n.a.
11. Ethylene glycol monobutyl ether acetate {(a glycol ether)}	112-07-2	n.a.	n.a.	A3	n.a.
12. Proprietary Resin	NA	n.a.	n.a.	n.a.	n.a.
13. Methyl ether {Dimethyl ether}	115-10-6	n.a.	n.a.	n.a.	n.a.

**Carcinogenicity:** NTP? Unknown IARC Monographs? Unknown OSHA Regulated? Unknown

### 12. Ecological Information

No data available.

### 13. Disposal Considerations

#### Waste Disposal Method

Dispose of in accordance with all applicable local, state, and federal regulations.

### 14. Transport Information

#### LAND TRANSPORT (US DOT)

**DOT Proper Shipping Name** UN1950, AEROSOLS, flammable, 2.1, LTD QTY  
**DOT Hazard Class:** 2.1  
**DOT Hazard Label:** FLAMMABLE GAS  
**UN/NA Number:** 1950

#### MARINE TRANSPORT (IMDG/IMO)

**IMDG/IMO Proper Shipping Name** UN1950, AEROSOLS, flammable, 2.1, LTD QTY  
**UN Number:** 1950  
**Marine Pollutant:** No

#### Additional Transport Information

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

### 15. Regulatory Information

#### US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Toluene {Benzene, Methyl-; Toluol}	108-88-3	No	Yes 1000 LB	Yes	Yes
2. Styrene {Phenylethylene; Vinyl benzine; Styrol}	100-42-5	No	Yes 1000 LB	Yes	Yes
3. Proprietary Resin	NA	No	No	No	No
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	No	Yes 1000 LB	Yes	No
5. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	No	Yes 1000 LB	Yes	No
6. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	No	Yes 100 LB	Yes	Yes
7. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	Yes 1000 LB	Yes	Yes
8. Proprietary Resin	NA	No	No	No	No
9. Methyl ethyl ketone {MEK; 2-Butanone}	78-93-3	No	Yes 5000 LB	No	Yes
10. Butyl acetate {Acetic acid, Butyl ester}	123-86-4	No	Yes 5000 LB	No	No
11. Ethylene glycol monobutyl ether acetate {(a glycol ether)}	112-07-2	No	No	Yes-Cat. N230	No
12. Proprietary Resin	NA	No	Yes 1000 LB	No	No

# MATERIAL SAFETY DATA SHEET

## Bulldog Aerosol Adhesion Promoter

Page: 7

Printed: 02/11/2008

Revision: 02/08/2008

Supercedes Revision: 01/25/2008

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
13. Methyl ether {Dimethyl ether}	115-10-6	No	No	No	No

### SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

<b>Sec.302:</b>	EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
<b>Sec.304:</b>	EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
<b>Sec.313:</b>	EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
<b>Sec.110:</b>	EPA SARA 110 Superfund Site Priority Contaminant List

## 16. Other Information

### Company Policy or Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.