

**MATERIAL SAFETY DATA SHEET**  
**Bulldog Adhesion Promoter & Sealer**

Page: 1

EW #51519ZP - Bulldog Sealer  
and Adhesion Promoter Quart



Printed: 05/14/2009  
Revision: 05/14/2009  
Supersedes Revision: 05/05/2009  
Date Created: 02/02/2009

## 1. Product and Company Identification

**Product Code:** 51519ZP  
**Product Name:** Bulldog Adhesion Promoter & Sealer  
**Distributed By:** The Easthill Group  
dba/ The Eastwood Company  
263 Shoemaker Road  
Pottstown, PA 19464  
USA & Canada: 800-345-1178  
Outside USA: 610-323-2200

**Emergency Contact:** Chem-Trec 800-424-9300

**Intended Use:** Paint adhesion and sealing.

**Synonyms**

GBDS12326, QBDS12327, PBDS12329, GBDS12326CN, QBDS12327CN

## 2. Hazards Identification

### Emergency Overview

Warning. Flammable. Harmful if swallowed. May cause eye irritation. May cause skin irritation.

### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

### Health Hazards (Acute and Chronic)

#### Skin Contact:

Harmful is absorbed through the skin. Contact with the skin may cause mild to moderate skin irritation, defatting and drying of the skin, and allergic dermatitis. Symptoms may include redness, swelling, and burning of the skin.

#### Eye Contact:

This material is an eye irritant. May cause irritation, stinging, tearing, redness, swelling, pain and blurred vision.

#### Inhalation:

Vapors can be harmful if inhaled. Effects from exposure may include headaches, dizziness, fatigue, and nausea. High concentrations may result in central nervous system depression, irritation to the respiratory tract, and pulmonary edema.

#### Ingestion:

Harmful or fatal if swallowed. Effects from exposure through ingestion may include gastrointestinal disturbances, pain, discomfort, gastrointestinal irritation, nausea, vomiting, diarrhea, irritation to the mouth, throat, and stomach. Other effects may produce central nervous system effects, such as dizziness, loss of balance and coordination, unconsciousness, coma, and even death. Pulmonary aspiration hazard.

**Chronic Effects:** Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or

fatal.

### Signs and Symptoms Of Exposure

See Health Hazards.

### Medical Conditions Generally Aggravated By Exposure

Skin, eye, liver, kidney, central nervous system, respiratory, lung (asthma-like conditions).

## 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5	40.0 -70.0 %
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	1.0 -5.0 %
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	3.0 -7.0 %
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	5.0 -10.0 %
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	1.0 -5.0 %
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	1.0 -5.0 %
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	1.0 -5.0 %
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0	1.0 -5.0 %
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	1.0 -4.0 %

## 4. First Aid Measures

### Emergency and First Aid Procedures

#### Skin:

Remove contaminated clothing. Wash skin thoroughly with large amounts of water and mild soap, if available. Seek medical attention if irritation develops or persists.

#### Eyes:

Immediately flush eyes with water for at least 15 minutes. Seek medical attention.

#### Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

#### Ingestion:

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

### Note to Physician

Treat symptomatically. Treatment of overexposure should be directed at the control of the symptoms and the clinical condition of the patient.

## 5. Fire Fighting Measures

### Flammability Classification:

OSHA Class IB

### Flash Pt:

38.00 F (3.3 C) Method Used: Pensky-Marten Closed Cup

### Explosive Limits:

LEL: No data.

UEL: No data.

### Special Fire Fighting Procedures

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear. Containers exposed to heat may pressurize. Stay away from the heads of exposed containers. Use water spray to cool fire exposed containers. Vapors are heavier than air.

### Unusual Fire and Explosion Hazards

Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.

**Hazardous Combustion Products**

May form: carbon dioxide and carbon monoxide, various hydrocarbons, and irritating or toxic vapors

**Suitable Extinguishing Media**

Use alcohol foam, carbon dioxide, or dry chemical powder.

**Unsuitable Extinguishing Media**

Do not use a solid water stream, as this may spread the fire.

## 6. Accidental Release Measures

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

Clean up spills immediately, observing precautions in Protective Equipment section.

Isolate the hazard area and deny entry. Keep unnecessary people away. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep ignition sources out of the hazard area.

Small spills: Absorb the liquid with inert material, such as sand, earth, or other noncombustible material and place into a compatible container for disposal.

Large spills: Dike far ahead of the spill for later disposal.

Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.

## 7. Handling and Storage

**Precautions To Be Taken in Handling**

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

Keep away from sources of ignition. Ground and bond containers when transferring material. No smoking when handling this material.

Use in well ventilated areas.

**Precautions To Be Taken in Storing**

Keep container closed when not in use. Do not store in direct sunlight. Store in a tightly closed container. Store in cool, dry area.

Do not store in at temperatures above 49 C / 120 F. Keep away from sources of ignition.

## 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA TWA	ACGIH TWA	Other Limits
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5	PEL: 200 ppm	TLV: 200 ppm	No data.
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	PEL: 100 ppm STEL: 600 ppm/(5min/3hr) CEIL: 200 ppm	TLV: 20 ppm STEL: 40 ppm	No data.
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	PEL: 200 ppm STEL: 500 ppm/(10min) CEIL: 300 ppm	TLV: 50 ppm	No data.

Hazardous Components (Chemical Name)	CAS #	OSHA TWA	ACGIH TWA	Other Limits
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	No data.	TLV: 100 ppm STEL: 150 ppm	No data.
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	PEL: 100 ppm	TLV: 100 ppm STEL: 125 ppm	No data.
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	No data.	TLV: 100 ppm STEL: 150 ppm	No data.
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	No data.	TLV: 100 ppm STEL: 150 ppm	No data.
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0	No data.	TLV: 10 ppm	No data.
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	PEL: 50 ppm	TLV: 20 ppm	No data.

**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.

A dust mask does not provide protection against vapors.

**Eye Protection**

Chemical goggles or face shields are recommended when splashing or spraying of chemical is possible. A faceshield provides more protection to help reduce chemical contact to the face and eyes.

**Protective Gloves**

Wear gloves with as much resistance to the chemical ingredients as possible. Laminate film gloves offer the best protection. Other glove materials such as nitrile may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information.

**Other Protective Clothing**

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

**Ventilation**

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.

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 when handling this product. Wash hands thoroughly after use and before eating, drinking, or smoking. Do not eat, drink, or smoke in the work area. Discard any clothing or other protective equipment that cannot be decontaminated.

**9. Physical and Chemical Properties**

<b>Physical States:</b>	[ ] Gas [ X ] Liquid [ ] Solid
<b>Melting Point:</b>	< 0.00 F (-17.8 C)
<b>Boiling Point:</b>	208.00 F (97.8 C)
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	38.00 F (3.3 C) Method Used: Pensky-Marten Closed Cup
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.

**Specific Gravity (Water = 1):** 0.915  
**Density:** 7.7 LB/GL  
**Bulk density:** No data.  
**Vapor Pressure (vs. Air or mm Hg):** No data.  
**Vapor Density (vs. Air = 1):** > 1  
**Evaporation Rate (vs Butyl Acetate=1):** > 1  
**Solubility in Water:** Slight

**Solubility Notes**

Very slightly soluble in water.

**Percent Volatile:** ~ 80 % by weight.  
**VOC / Volume:** 540.0000 G/L  
**Heat Value:** No data.  
**Particle Size:** No data.  
**Corrosion Rate:** No data.  
**pH:** No data.

**Appearance and Odor**

Liquid, clear to cloudy/hazy.

**10. Stability and Reactivity**

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

**Conditions To Avoid - Instability**

No data available.

**Incompatibility - Materials To Avoid**

Strong oxidizing agents, alkalies, acids, nitrates, metal salts and polymerization catalysts.

**Hazardous Decomposition Or Byproducts**

Carbon monoxide, carbon dioxide, oxides of nitrogen, and various hydrocarbons and toxic vapors.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions**

No data available.

**11. Toxicological Information**

Product has not been tested as a whole.

**EFFECTS OF ACUTE EXPOSURE**

Component Analysis	Ingredient LD50 (oral)	LC50 Xylene 3523 mg/kg, rat 5000 ppm 4 hrs, rat
Ethylene glycol monobutyl ether	470 mg/kg, rat 450 ppm 4 hrs, rat	
Tert-butyl acetate	4100 mg/kg, rat	> 2230 mg/m <sup>3</sup> 4hr, rat
Styrene	2650 mg/kg, rat	12000 mg/m <sup>3</sup> , rat
Toluene	636 mg/kg, rat	8000 mg/m <sup>3</sup> , rat
Divinylbenzene	Not Available	Not Available

**Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Skin:** May cause skin irritation. May cause sensitisation by skin contact. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

**Ingestion:** May cause stomach distress, nausea or vomiting. Harmful: may cause lung

damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis. Vapours may cause drowsiness and dizziness.

### Chronic Toxicological Effects

Mutagenicity: Hazardous by WHMIS criteria.

Reproductive Effects: Not hazardous by WHMIS criteria.

Teratogenicity: Hazardous by WHMIS criteria.

Embryotoxicity: Hazardous by WHMIS criteria.

Respiratory Sensitization: Not hazardous by WHMIS criteria.

Skin Sensitization: Hazardous by WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

### Carcinogenicity/Other Information

No ingredients in this product are classified as Known Human Carcinogens as defined by NTP, IARC, or OSHA. Some ingredients may be listed by these agencies as possible human carcinogens.

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5	n.a.	n.a.	n.a.	n.a.
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	No	2B	A4	No
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	No	3	A4	No
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	n.a.	n.a.	A4	n.a.
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	2B	A3	No
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	n.a.	n.a.	A4	n.a.
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	n.a.	n.a.	A4	n.a.
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0	n.a.	n.a.	n.a.	n.a.
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	Possible	2B	A3	No

## 12. Ecological Information

Product has not been tested as a whole.

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not 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**

UN1263, PAINT RELATED MATERIAL, 3, PGII, LTD. QTY.

**LAND TRANSPORT (Canadian TDG)****Additional Transport Information**

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

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

### 15. Regulatory Information

**Canadian Chemical Lists**

Hazardous Components (Chemical Name)	CAS #	Canadian NPRI	Canadian IDL
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5		Yes
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	Yes	Yes
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	Yes	Yes
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	Yes	Yes
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	Yes	Yes
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	Yes	Yes
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	Yes	Yes
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0		
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	Yes	Yes

**Canadian WHMIS Classification**

CLASS B, DIVISION 2: Flammable Liquids

CLASS D, DIVISION 2, SUBDIVISION A: Very Toxic Materials (carcinogens, reproductive toxicity, etc.)

CLASS D, DIVISION 2, SUBDIVISION B: Toxic Materials (Mutagenicity, skin sensitization, irritation, etc.)

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5	No	Yes 5000 LB	No	
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	No	Yes 1000 LB	Yes	Yes
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	No	Yes 1000 LB	Yes	Yes
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	No	Yes 1000 LB	Yes	No
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	No	Yes 1000 LB	Yes	Yes
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	No	Yes 1000 LB	Yes	Yes

**MATERIAL SAFETY DATA SHEET**  
**Bulldog Adhesion Promoter & Sealer**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	No	Yes 100 LB	Yes	Yes
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0	No	No	No	
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	No	No	Yes-Cat. N230	

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. tert-Butyl acetate {Acetic acid, tert-butyl ester}	540-88-5	No		Inventory, 8A PAIR, 8D	
2. Styrene {Phenylethylene; Vinyl benzene; Styrol}	100-42-5	HAP	Yes	Inventory, 8A PAIR	
3. Toluene {Benzene, Methyl-; Toluol}	108-88-3	HAP	Yes	Inventory, 8A CAIR, 8A PAIR	Yes
4. m-Xylene {Benzene, m-Dimethyl-}	108-38-3	HAP		Inventory, 8A PAIR	
5. Ethylbenzene {Ethylbenzol; Phenylethane}	100-41-4	HAP	Yes	Inventory, 8A PAIR	No
6. o-Xylene {Benzene, o-Dimethyl-}	95-47-6	HAP		Inventory, 8A PAIR	
7. p-Xylene {Benzene, p-Dimethyl-}	106-42-3	HAP		Inventory, 8A PAIR, 8D	
8. Divinyl benzene (Benzene, Diethenyl-)	1321-74-0	No		Inventory	
9. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	No		Inventory, 8A PAIR, 8D	

**Canadian Regulatory Lists:**

- Canadian NPRI: Canadian National Pollutant Release Inventory
- Canadian IDL: Canadian Ingredient Disclosure List

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

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

**TSCA (Toxic Substances Control Act) Lists:**

- Inventory: Chemical Listed in the TSCA Inventory.
- 5A(2): Chemical Subject to Significant New Rules (SNURS)
- 6A: Commercial Chemical Control Rules
- 8A: Toxic Substances Subject To Information Rules on Production
- 8A CAIR: Comprehensive Assessment Information Rules - (CAIR)
- 8A PAIR: Preliminary Assessment Information Rules - (PAIR)
- 8C: Records of Allegations of Significant Adverse Reactions
- 8D: Health and Safety Data Reporting Rules
- 8D TERM: Health and Safety Data Reporting Rule Terminations
- 12(b): Notice of Export

**Other Important Lists:**

- CWA NPDES: EPA Clean Water Act NPDES Permit Chemical
- CAA HAP: EPA Clean Air Act Hazardous Air Pollutant
- CAA ODC: EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)
- CA PROP 65: California Proposition 65

**International Regulatory Lists:**



**EPA Hazard Categories:**

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

- Yes  No Acute (immediate) Health Hazard
- Yes  No Chronic (delayed) Health Hazard
- Yes  No Fire Hazard
- Yes  No Sudden Release of Pressure Hazard
- Yes  No Reactive Hazard

**Regulatory Information**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Concentrations reported in section 2 are weight/weight.

Ingredients disclosed in section 2 are on Canadian DSL.

**WHMIS Classifications:**

Class B2 - Flammable Liquid

Class D2A - Carcinogenicity, Teratogenicity, and Embrotoxicity

Class D2B - Mutagenicity, Skin Sensitization, Skin/Eye Irritant

## 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.