

SECTION I - PRODUCT: BITUMASTIC 300 M PART A (0165A5NL)

Date: 11/10/99 Replaces 09/21/99

(aka BITUMASTIC NO. 300-M PART A)

CHEMTREC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300

PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
COAL TAR FIBER PITCH	68187-57-5	35%	.2MG/M3	NE	NE
TALC	14807-96-6	30%	2MG/M3	NE	NE
XYLENE	1330-20-7	20%	100 PPM	150 PPM	NE
POLYAMIDE	68082-29-1	15%	NE	NE	NE
ETHYL BENZENE	100-41-4	5%	100 PPM	125 PPM	NE
ETHYL ALCOHOL	64-17-5	5%	1000 PPM	NE	NE
TDMAM PHENOL	90-72-2	5%	NE	NE	NE
CLAY	71011-27-3	5%	NE	NE	NE
SILICA	14808-60-7	1%	0.1MG/M3	NE	NE

HAZARDOUS INGREDIENTS ADDITIONAL DATA

CHEMICAL NAME	(F)	(G)
COAL TAR FIBER PITCH	NOT AVAILABLE	NO/NO/1,2
TALC	NOT AVAILABLE	NO/NO
XYLENE	4300MG/KG RAT,ORAL 15000 PPM/4HRS RAT,INHALATION	NO/YES/1,2,3/ 1000#/U239
POLYAMIDE	>2000 MG/KG ORAL,RAT	NO/NO/1,2
ETHYL BENZENE	NOT AVAILABLE	NO/YES/1,2,3/ 1000#
ETHYL ALCOHOL	7060MG/KG RAT,ORAL 20000PPM/10HRS RAT,INHALATION	NO/NO/1,2,3
TDMAM PHENOL	2169 MG/KG ORAL	NO/NO
CLAY	NOT AVAILABLE	NO/NO
SILICA	NOT AVAILABLE	NO/NO/NR/NO

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route,LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CERCLA. NE = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

WHMIS CLASSIFICATION: B2 -- D2A -- D2B

HMIS/NFPA CLASSIFICATION: HEALTH 3, FLAMMABILITY 3, REACTIVITY 1,

PERSONAL PROTECTION CODE H, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: 173F(78C)-284F(140C). VAPOR DENSITY: Heavier than air.
 EVAPORATION RATE: Slower than ether. VOLATILE BY WEIGHT 21 %. VOLATILE BY VOLUME: 32 %. PRODUCT WT/GAL: 11.0 LBS/U.S.GAL. 1.32 sp gr.

PRODUCT: BITUMASTIC 300 M PART A

(0165A5NL)

Date: 11/10/99 Replaces 09/21/99

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: 75 F(23C) (Setaflash) LEL 1.0 %
UEL 19.0 %.

OSHA-FLAMMABLE LIQUID/OSHA/CLASS/1C, DOT-PAINT,3,UN1263,PGIII, CANADIAN TDGA:
PAINT,3,UN1263,PGIII

EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.

FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use nonferrous tools and to wear conductive and non-sparking shoes.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire exposure.

SECTION V - HEALTH HAZARD DATA:

INHALATION: May cause allergic respiratory reaction, effects may be permanent. Harmful if inhaled, may affect the brain or nervous system, causing dizziness, headache or nausea. May cause nose and throat irritation. May cause lung irritation.

CONTACT: May be harmful if absorbed through the skin. May cause eye burns. May cause skin burns. May cause allergic skin reaction.

NOTICE: Contains COAL TAR and SILICA which can cause cancer. Risk of cancer depends on duration and level of exposure. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: If sensitized to amines, epoxies or other chemicals do not use. See a physician if a medical condition exists.

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Dermal, Ingestion.

EMERGENCY FIRST AID PROCEDURES: When exposed always get medical attention.

EYE CONTACT: Flush with water for 15 minutes.

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing and clean before reuse.

INHALATION: Remove to fresh air. Provide oxygen if breathing is difficult. Use artificial respiration if not breathing. Get medical attention.

IF SWALLOWED: DO NOT INDUCE VOMITING!! Always get medical attention.

SECTION VI - REACTIVITY DATA:

STABILITY: This product is stable under normal storage conditions.

PRODUCT: BITUMASTIC 300 M PART A

(0165A5NL)

Date: 11/10/99 Replaces 09/21/99

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

CONDITIONS TO AVOID: Heat, sparks, and open flames.

INCOMPATIBILITY: Avoid contact with strong oxidizing agents.

SECTION VII - SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE OF SPILL: Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow safe handling and use guidelines in Section VIII. Contain and soak up residual with an absorbent (clay or sand). Take up absorbent material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section II for Sara Title III and CERCLA information.

SECTION VIII - SAFE HANDLING AND USE INFORMATION:

RESPIRATORY PROTECTION: Use only with ventilation to keep levels below exposure guidelines. (Section II). User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use.

VENTILATION: Use explosion-proof ventilation when required to keep below health exposure guidelines and Lower Explosion Limit (LEL).

SKIN AND EYE PROTECTION: Recommend impervious gloves, clothing and safety glasses with side shields or chemical goggles to avoid skin and eye contact. If material penetrates to skin, change gloves and clothing. Hypersensitive persons should wear gloves or use protective cream.

HYGIENIC PRACTICES: Wash with soap and water before eating, drinking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and pass through hazardous materials. Check shoes carefully after soaking before reuse.

APPLICATION: Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

SECTION IX - SPECIAL PRECAUTIONS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, open flame, and strong oxidizing agents. Keep containers closed. Store in cool, dry place with adequate ventilation. If pouring or transferring materials, ground all containers and tools.

OTHER PRECAUTIONS: Do not weld, heat, cut or drill on full or empty containers.

PRODUCT: BITUMASTIC 300 M PART A

(0165A5NL)

Date: 11/10/99 Replaces 09/21/99

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Carboline Company 350 Hanley Ind. Ct. St. Louis, MO 63144

PHONE NO. 314-644-1000 FOR INDUSTRIAL USE ONLY

CARBOLINE CO. MATERIAL SAFETY DATA SHEET
PRODUCT: BITUMASTIC 300 M PART A

(0165A5NL)

Date: 11/10/99 Replaces 09/21/99

STATE SPECIFIC STATE REGULATORY INFORMATION

NEW JERSEY

PENNSYLVANIA

Non-Hazardous Materials above 1 Percent:

Name	CAS	Pct
------	-----	-----

No materials meet this criteria

CALIFORNIA

WARNING: This product contains a chemical(s)
known to the State of California to cause
cancer, and birth defects or other reproductive harm.

SECTION I - PRODUCT: BITUMASTIC 300 M PART B (0165B5NL)

Date: 11/10/99 Replaces 12/28/95

(aka BITUMASTIC NO. 300-M PART B)

CHEMTREC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300

PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
EPOXY RESIN	25068-38-6	100% NE		NE	NE

CHEMICAL NAME	(F)	(G)
EPOXY RESIN	11.4G/KG RAT, ORAL >20ML/KG SKIN, SENSITIZER	NO/NO/1,2

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route, LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CERCLA. NE = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

WHMIS CLASSIFICATION: D2B

HMIS/NFPA CLASSIFICATION: HEALTH 2, FLAMMABILITY 0, REACTIVITY 0,

PERSONAL PROTECTION CODE B, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: N/A. VAPOR DENSITY: N/A EVAPORATION RATE: N/A VOLATILE BY WEIGHT 0 %. VOLATILE BY VOLUME: 0 %. PRODUCT WT/GAL: 9.7 LBS/U.S.GAL. 1.16 sp gr.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: No Flash Point. LEL: N/A UEL: N/A

OSHA-COMBUSTIBLE LIQUID/OSHA/CLASS/IIIB, DOT-PAINT, NOT REGULATED, CANADIAN TDGA: NOT REGULATED

EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.

FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL). Eliminate all ignition sources. Keep away from sparks, open flames and heat sources. All electric equipment and installations should be made and grounded in accordance with the National Electrical Code. In areas where explosion hazards exist, workers should be required to use nonferrous tools and to wear conductive and non-sparking shoes.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire

PRODUCT: BITUMASTIC 300 M PART B

(0165B5NL)

Date: 11/10/99 Replaces 12/28/95

exposure.

SECTION V - HEALTH HAZARD DATA:

INHALATION: May cause nose and throat irritation.

CONTACT: May cause eye irritation. May cause skin irritation. May cause allergic skin reaction.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: If sensitized to amines, epoxies or other chemicals do not use. See a physician if a medical condition exists.

PRIMARY ROUTE(S) OF ENTRY: Inhalation, Dermal, Ingestion.

EMERGENCY FIRST AID PROCEDURES: When exposed always get medical attention.

EYE CONTACT: Flush with water for 15 minutes.

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing and clean before reuse.

INHALATION: Remove to fresh air. Provide oxygen if breathing is difficult. Use artificial respiration if not breathing. Get medical attention.

IF SWALLOWED: DO NOT INDUCE VOMITING!! Always get medical attention.

SECTION VI - REACTIVITY DATA:

STABILITY: This product is stable under normal storage conditions.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, nitrogen oxides, and unidentified organic compounds. Consider all smoke and fumes from burning material as very hazardous. Welding, cutting or abrasive grinding can create smoke and fumes. Do not breathe any fumes or smoke from these operations.

CONDITIONS TO AVOID: Heat, sparks, and open flames.

INCOMPATIBILITY: Avoid contact with strong oxidizing agents.

SECTION VII - SPILL OR LEAK PROCEDURES:

STEPS TO BE TAKEN IN CASE OF SPILL: Eliminate all ignition sources.

Handling equipment must be grounded to prevent sparking. Evacuate the area of unprotected personnel. Wear appropriate personal protection clothing and equipment. Follow safe handling and use guidelines in Section VIII. Contain and soak up residual with an absorbent (clay or sand). Take up absorbent material and seal tightly for proper disposal. Dispose of in accordance with local, state and federal regulations. Refer to Section II for Sara Title III and CERCLA information.

SECTION VIII - SAFE HANDLING AND USE INFORMATION:

RESPIRATORY PROTECTION: Use only with ventilation to keep levels below exposure guidelines. (Section II). User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure or if not able to monitor use MSHA/NIOSH approved supplied air respirator. Follow all current OSHA requirements for respirator use.

VENTILATION: Use explosion-proof ventilation when required to keep below

PRODUCT: BITUMASTIC 300 M PART B

(0165B5NL)

Date: 11/10/99 Replaces 12/28/95

health exposure guidelines and Lower Explosion Limit (LEL).

SKIN AND EYE PROTECTION: Recommend impervious gloves, clothing and safety glasses with side shields or chemical goggles to avoid skin and eye contact. If material penetrates to skin, change gloves and clothing. Hypersensitive persons should wear gloves or use protective cream.

HYGIENIC PRACTICES: Wash with soap and water before eating, drinking, applying cosmetics, or using toilet facilities. Use of a hand cleaner is recommended. Launder contaminated clothing before reuse. Leather shoes can absorb and pass through hazardous materials. Check shoes carefully after soaking before reuse.

APPLICATION: Use only in accordance with Carboline application instructions, container label and Product Data Sheet.

SECTION IX - SPECIAL PRECAUTIONS:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, open flame, and strong oxidizing agents. Keep containers closed. Store in cool, dry place with adequate ventilation. If pouring or transferring materials, ground all containers and tools.

OTHER PRECAUTIONS: Do not weld, heat, cut or drill on full or empty containers.

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Carboline Company 350 Hanley Ind. Ct. St. Louis, MO 63144

PHONE NO. 314-644-1000 FOR INDUSTRIAL USE ONLY

CARBOLINE CO. MATERIAL SAFETY DATA SHEET
PRODUCT: BITUMASTIC 300 M PART B

(0165B5NL)

Date: 11/10/99 Replaces 12/28/95

SPECIFIC STATE REGULATORY INFORMATION

NEW JERSEY

PENNSYLVANIA

Non-Hazardous Materials above 1 Percent:

Name	CAS	Pct
-----	-----	-----

No materials meet this criteria

CALIFORNIA

WARNING: This product contains a chemical(s)
known to the State of California to cause
cancer, and birth defects or other reproductive harm.

