

**PRODUCT NAME:** VINYL ESTER NOVOLAC COATING- PART A  
**PRODUCT CODE:** VNC-A-1008

**HMIS CODES:** H F R P  
 2 3 2 C

===== SECTION I - MANUFACTURER IDENTIFICATION =====

**MANUFACTURER'S NAME:** Polymerica Inc.  
**ADDRESS :** 3821 Collins Lane  
 Louisville, KY 40245

**EMERGENCY PHONE :** 1-800-535-5053      **DATE PRINTED :** 4/1/08  
**INFORMATION PHONE :** 1-800-762-1678

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
* Vinyl ester resin	0068002-44-8	7	20 C    80% TO 90%
Styrene: ACGIH TLV 20 ppm TWA 40 ppm STEL skin OSHA PEL 50 ppm TWA, 100 ppm STEL			
Titanium Dioxide	13463-67-7	N/A	N/A    0% TO 10%
PEL (OSHA)- TiO2- 15 mg/m3, total dust, 8 Hr. TWA TLV (ACGIH)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA, A4 AEL (DuPont)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA 5 mg/m3, respirable dust, 8 Hr. TWA			
Unsaturated polyeste-viscous alkyd (prepolymer)	65556-71-0	5	20 C    0% TO 10%
None Established			
Carbon Black	1333-86-4	N/A	N/A    0% TO 10%
Carbon black: ACGIH- TLV 3.5 mg/m3 OSHA- PEL 3.5 mg/m3			
Cobalt Napthenate	61789-51-3	2	68 F    0% TO 10%
Cobalt napthenate: TLV 0.1 mg/m3 Mineral spirits: TLV 350 mg/m3			
Acrylate Copolymer	26376-86-3	5	302 F    0% TO 10%
None Established			
Siloxanes & Silicones	67762-90-7	N/A	N/A    0% TO 10%
Siloxanes & silicones, di-Me, reaction products w/ silica: ACGIH 5 mg/m3 resp. 10 mg/m3 total dust.			
Aliphatic Petroleum Distillates	064742-47-8	6	68 F    0% TO 10%
Aliphatic Petroleum Distillates: 500ppm OSHA TWA, 100ppm ACGIH TWA Mineral Spirits: 500ppm OSHA TWA, 100 ppm ACGIH TWA			

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

**BOILING RANGE:** 313 F - 401 F      **SPECIFIC GRAVITY (H2O=1):** 1.1482  
**VAPOR DENSITY:** 3.6 (Styrene)      **EVAPORATION RATE:** Heavier than air  
 (Air=1).

**COATING V.O.C.:** 2.89 lb/gl      **MATERIAL V.O.C.:** 2.89 lb/gl  
**SOLUBILITY IN WATER:** NIL.  
**APPEARANCE AND ODOR:** Moderately viscous liquid, color varies with specific  
 pigmentation. Pungent odor.



Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

**EMERGENCY AND FIRST AID PROCEDURES**

Eyes: Flush with potable water immediately for 15 minutes. If irritation develops, get medical attention.

Skin: Remove with soap and warm water.

Ingestion: DO NOT induce vomiting. Get immediate medical attention.

Inhalation: Remove to fresh air. If unconscious, apply mouth to mouth resuscitation.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Flammable material. Isolate from all sources of ignition. Protect personnel involved in clean up from vapors of styrene. Soak up spill with absorbant material such as clay or sand. Residual resin may be removed by steam cleaning or by use of solvents.

**WASTE DISPOSAL METHOD**

Place in covered container for disposal. Dispose in an approved incinerator or an approved landfill in accordance with federal, state and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Provide ventilation to keep styrene TLV below the exposure guideline value. If TLV exceeded, use a NIOSH approved respirator. Keep containers tightly closed when not in use. If mixtures of parts A & B are allowed to remain in the mixing vessel past the pot-life deadline, heat and a strong reaction will result.

**OTHER PRECAUTIONS**

===== SECTION VIII - CONTROL MEASURES =====

**RESPIRATORY PROTECTION**

If TLV exceeded or being spray applied, use NIOSH approved organic vapor cartridge or positive pressure breathing apparatus.

**VENTILATION**

Use good general mechanical ventilation and local exhaust.

**PROTECTIVE GLOVES**

Wear neoprene or natural rubber gloves.

**EYE PROTECTION**

NIOSH approved safety glasses or goggles.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Body protection as necessary to prevent skin contact. Wash after handling. Provide eye wash fountain and safety shower.

**WORK/HYGIENIC PRACTICES**

Avoid breathing vapor mist or spray. Provide eye wash fountain and safety shower. Wash hands thoroughly after use, before eating or smoking.

===== SECTION IX - DISCLAIMER =====

The product information contained herein is believed to be accurate as of the date of the Material Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.

**PRODUCT NAME:** VINYL ESTER NOVOLAC COATING- PART OPA  
**PRODUCT CODE:** VNC-OPA-1000

**HMIS CODES:** H F R P  
 2 3 2 C

===== SECTION I - MANUFACTURER IDENTIFICATION =====

**MANUFACTURER'S NAME:** Polymerica, Inc.  
**ADDRESS :** 3821 Collins Lane  
 Louisville, KY 40245

**EMERGENCY PHONE :** 1-800-535-5053      **DATE PRINTED :** 4/1/08  
**INFORMATION PHONE :** 1-800-762-1678

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
* Vinyl ester resin	0068002-44-8	7	20 C    70% TO 80%
Styrene: ACGIH TLV 20 ppm TWA 40 ppm STEL skin OSHA PEL 50 ppm TWA, 100 ppm STEL			
Titanium Dioxide	13463-67-7	N/A	N/A    0% TO 10%
PEL (OSHA)- TiO2- 15 mg/m3, total dust, 8 Hr. TWA TLV (ACGIH)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA, A4 AEL (DuPont)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA 5 mg/m3, respirable dust, 8 Hr. TWA			
Unsaturated polyeste-viscous alkyd (prepolymer)	65556-71-0	5	20 C    0% TO 10%
None Established			
Siloxanes & Silicones	67762-90-7	N/A	N/A    0% TO 10%
Siloxanes & silicones, di-Me, reaction products w/ silica: ACGIH 5 mg/m3 resp. 10 mg/m3 total dust.			
Cobalt Napthenate	61789-51-3	2	68 F    0% TO 10%
Cobalt napthenate: TLV 0.1 mg/m3 Mineral spirits: TLV 350 mg/m3			
Carbon Black	1333-86-4	N/A	N/A    0% TO 10%
Carbon black: ACGIH- TLV 3.5 mg/m3 OSHA- PEL 3.5 mg/m3			
Acrylate Copolymer	26376-86-3	5	302 F    0% TO 10%
None Established			
Aliphatic Petroleum Distillates	064742-47-8	6	68 F    0% TO 10%
Aliphatic Petroleum Distillates: 500ppm OSHA TWA, 100ppm ACGIH TWA Mineral Spirits: 500ppm OSHA TWA, 100 ppm ACGIH TWA			

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

**BOILING RANGE:** 313 F - 401 F      **SPECIFIC GRAVITY (H2O=1):** 1.1713  
**VAPOR DENSITY:** 3.6 (Styrene)      **EVAPORATION RATE:** Heavier than air  
 (Air=1).

**COATING V.O.C.:** 2.83 lb/gl      **MATERIAL V.O.C.:** 2.83 lb/gl  
**SOLUBILITY IN WATER:** NIL.  
**APPEARANCE AND ODOR:** Moderately viscous liquid, color varies with specific  
 pigmentation. Pungent odor.



Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

**EMERGENCY AND FIRST AID PROCEDURES**

Eyes: Flush with potable water immediately for 15 minutes. If irritation develops, get medical attention.

Skin: Remove with soap and warm water.

Ingestion: DO NOT induce vomiting. Get immediate medical attention.

Inhalation: Remove to fresh air. If unconscious, apply mouth to mouth resuscitation.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Flammable material. Isolate from all sources of ignition. Protect personnel involved in clean up from vapors of styrene. Soak up spill with absorbant material such as clay or sand. Residual resin may be removed by steam cleaning or by use of solvents.

**WASTE DISPOSAL METHOD**

Place in covered container for disposal. Dispose in an approved incinerator or an approved landfill in accordance with federal, state and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Provide ventilation to keep styrene TLV below the exposure guideline value. If TLV exceeded, use a NIOSH approved respirator. Keep containers tightly closed when not in use. If mixtures of parts A & B are allowed to remain in the mixing vessel past the pot-life deadline, heat and a strong reaction will result.

**OTHER PRECAUTIONS**

===== SECTION VIII - CONTROL MEASURES =====

**RESPIRATORY PROTECTION**

If TLV exceeded or being spray applied, use NIOSH approved organic vapor cartridge or positive pressure breathing apparatus.

**VENTILATION**

Use good general mechanical ventilation and local exhaust.

**PROTECTIVE GLOVES**

Wear neoprene or natural rubber gloves.

**EYE PROTECTION**

NIOSH approved safety glasses or goggles.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Body protection as necessary to prevent skin contact. Wash after handling. Provide eye wash fountain and safety shower.

**WORK/HYGIENIC PRACTICES**

Avoid breathing vapor mist or spray. Provide eye wash fountain and safety shower. Wash hands thoroughly after use, before eating or smoking.

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**PRODUCT NAME:** VINYL ESTER NOVOLAC COATING- PART WGA  
**PRODUCT CODE:** VNC-WGA-1000

**HMIS CODES:** H F R P  
 2 3 2 C

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**EMERGENCY PHONE :** 1-800-535-5053      **DATE PRINTED :** 4/1/08  
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REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
* Vinyl ester resin	0068002-44-8	7	20 C    70% TO 80%
Styrene: ACGIH TLV 20 ppm TWA 40 ppm STEL skin OSHA PEL 50 ppm TWA, 100 ppm STEL			
Titanium Dioxide	13463-67-7	N/A	N/A    0% TO 10%
PEL (OSHA)- TiO2- 15 mg/m3, total dust, 8 Hr. TWA TLV (ACGIH)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA, A4 AEL (DuPont)- TiO2- 10 mg/m3, total dust, 8 Hr. TWA 5 mg/m3, respirable dust, 8 Hr. TWA			
Unsaturated polyeste-viscous alkyd (prepolymer)	65556-71-0	5	20 C    0% TO 10%
None Established			
Siloxanes & Silicones	67762-90-7	N/A	N/A    0% TO 10%
Siloxanes & silicones, di-Me, reaction products w/ silica: ACGIH 5 mg/m3 resp. 10 mg/m3 total dust.			
Cobalt Napthenate	61789-51-3	2	68 F    0% TO 10%
Cobalt napthenate: TLV 0.1 mg/m3 Mineral spirits: TLV 350 mg/m3			
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Carbon black: ACGIH- TLV 3.5 mg/m3 OSHA- PEL 3.5 mg/m3			
Acrylate Copolymer	26376-86-3	5	302 F    0% TO 10%
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Aliphatic Petroleum Distillates: 500ppm OSHA TWA, 100ppm ACGIH TWA Mineral Spirits: 500ppm OSHA TWA, 100 ppm ACGIH TWA			

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

**BOILING RANGE:** 313 F - 401 F      **SPECIFIC GRAVITY (H2O=1):** 1.1713  
**VAPOR DENSITY:** 3.6 (Styrene)      **EVAPORATION RATE:** Heavier than air  
 (Air=1).

**COATING V.O.C.:** 2.83 lb/gl      **MATERIAL V.O.C.:** 2.83 lb/gl  
**SOLUBILITY IN WATER:** NIL.  
**APPEARANCE AND ODOR:** Moderately viscous liquid, color varies with specific pigmentation. Pungent odor.



Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

**EMERGENCY AND FIRST AID PROCEDURES**

Eyes: Flush with potable water immediately for 15 minutes. If irritation develops, get medical attention.

Skin: Remove with soap and warm water.

Ingestion: DO NOT induce vomiting. Get immediate medical attention.

Inhalation: Remove to fresh air. If unconscious, apply mouth to mouth resuscitation.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Flammable material. Isolate from all sources of ignition. Protect personnel involved in clean up from vapors of styrene. Soak up spill with absorbant material such as clay or sand. Residual resin may be removed by steam cleaning or by use of solvents.

**WASTE DISPOSAL METHOD**

Place in covered container for disposal. Dispose in an approved incinerator or an approved landfill in accordance with federal, state and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Provide ventilation to keep styrene TLV below the exposure guideline value. If TLV exceeded, use a NIOSH approved respirator. Keep containers tightly closed when not in use. If mixtures of parts A & B are allowed to remain in the mixing vessel past the pot-life deadline, heat and a strong reaction will result.

**OTHER PRECAUTIONS**

===== SECTION VIII - CONTROL MEASURES =====

**RESPIRATORY PROTECTION**

If TLV exceeded or being spray applied, use NIOSH approved organic vapor cartridge or positive pressure breathing apparatus.

**VENTILATION**

Use good general mechanical ventilation and local exhaust.

**PROTECTIVE GLOVES**

Wear neoprene or natural rubber gloves.

**EYE PROTECTION**

NIOSH approved safety glasses or goggles.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Body protection as necessary to prevent skin contact. Wash after handling. Provide eye wash fountain and safety shower.

**WORK/HYGIENIC PRACTICES**

Avoid breathing vapor mist or spray. Provide eye wash fountain and safety shower. Wash hands thoroughly after use, before eating or smoking.

===== SECTION IX - DISCLAIMER =====

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PRODUCT NAME: Vinyl Ester Novolac Hardener  
 PRODUCT CODE: VNB/VNC-B

HMIS CODES: H F R P  
 3\*3 2 C

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: Polymerica Inc.  
 ADDRESS : 3821 Collins Lane  
 Louisville, KY 40245

EMERGENCY PHONE : 1-800-535-5053      DATE PRINTED : 4/1/08  
 INFORMATION PHONE : 1-800-762-1678

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
* Cumene Hydroperoxide	80-15-9	1	73 C    90% TO 100%
Cumene: ACGIH TLV 50 ppm skin TWA			

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: N/D      SPECIFIC GRAVITY (H2O=1): 1.028  
 VAPOR DENSITY: 5.4 (Air=1)      EVAPORATION RATE: Heavier than air  
 (Air=1).

COATING V.O.C.: 0.0 lb/gl      MATERIAL V.O.C.: 0.0 lb/gl  
 SOLUBILITY IN WATER: Very Slight.  
 APPEARANCE AND ODOR: Clear yellow liquid with sharp aromatic odor.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 133 F      METHOD USED: SETAFLASH  
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: N/D      UPPER: N/D

EXTINGUISHING MEDIA: Water fog, dry chemical, foam.

**SPECIAL FIREFIGHTING PROCEDURES**  
 If large amount is involved, evacuate area and fight fire from safe distance. Cool surrounding material with water.  
 Use positive pressure self contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**  
 OSHA Class 1B. Can decompose with force if confined during exposure to fire

===== SECTION V - REACTIVITY DATA =====

STABILITY: Unstable.  
 CONDITIONS TO AVOID  
 Avoid heat, flames, sparks, ignition, and contamination.

**INCOMPATIBILITY (MATERIALS TO AVOID)**  
 Avoid contact with strong acids, strong alkalis, transition metal salts, reducing agents and vermiculite.

**HAZARDOUS DECOMPOSITION OR BYPRODUCTS**

Can decompose with force if confined during exposure to fire.

**HAZARDOUS POLYMERIZATION:**

===== SECTION VI - HEALTH HAZARD DATA =====

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**

Narcotic effects. Irritant to upper respiratory tract.

**SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE**

Corrosive (severe).

**SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**

Corrosive.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**

Not likely under conditions of use. Corrosive.

**HEALTH HAZARDS (ACUTE AND CHRONIC)**

ORAL (acute) (rats)- LD50= 800-1600 mg/kg

DERMAL (acute) (rabbit)- Severe irritation (delayed)

INHALATION (acute) (rats)- LC50= 700 ppm

Tests run on 83% material.

**CARCINOGENICITY:    NTP CARCINOGEN:                    IARC MONOGRAPHS:                    OSHA REGULATED:**

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

Skin contact may aggravate an existing dermatitis (skin condition). Overexposure to vapor, dust or mist may aggravate existing respiratory conditions such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

**EMERGENCY AND FIRST AID PROCEDURES**

Eyes: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

Skin: Remove contaminated clothing, launder. Wash with soap and water. Get medical attention.

Ingestion: DO NOT induce vomiting. Get emergency medical attention for lavage.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Absorb with soda ash. Sweep or scoop up using non-sparking tools. DO NOT use vermaculite.

**WASTE DISPOSAL METHOD**

Place in covered container for disposal. Dispose in an approved incinerator or an approved landfill in accordance with federal, state and local regulations.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Use with adequate ventilation and local exhaust. Do not store near combustibles. Empty containers may contain hazardous residues. Keep containers tightly closed when not in use. Keep away from heat, sparks and flames. Do not reuse containers.

**OTHER PRECAUTIONS**

===== SECTION VIII - CONTROL MEASURES =====

**RESPIRATORY PROTECTION**

Use with adequate ventilation and local exhaust. If being spray applied, use NIOSH approved organic vapor canister or positive pressure breathing apparatus.

**VENTILATION**

Mechanical ventilation is required if TLV is expected to be exceeded in confined areas.

**PROTECTIVE GLOVES**

Wear neoprene or natural rubber gloves.

**EYE PROTECTION**

NIOSH approved safety glasses or goggles.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Body protection as necessary to prevent skin contact. Wash after handling. Provide eye wash fountain and safety shower.

**WORK/HYGIENIC PRACTICES**

Avoid breathing vapor mist or spray. Provide eye wash fountain and safety shower. Wash hands thoroughly after use, before eating or smoking.

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