

Del Rec'd 4/10/97

40-7604



**BP CHEMICALS**

BP Chemicals Inc.  
Ft. Amanda Road  
P.O. Box 628  
Lima, Ohio 45802-0628  
(419) 226-1200

VIA OVERNIGHT MAIL

Mr. Sam Nalluswami  
Low-Level Waste and Decommissioning Projects Branch  
Division of Waste Management  
Office of Nuclear Materials and Safeguards  
United States Nuclear Regulatory Commission  
Two White Flint North  
11545 Rockville Road  
North Bethesda, MD 20852

December 10, 1996

Re: License No. SUB-908  
Docket No. 040-07604

Subject: Mixed Waste Pond Closure Project  
Field Change No. 015

Dear Sir:

In accordance with the mixed waste pond closure project field change approval procedure (BPCI Administrative Procedure AP-02), BP Chemicals, Inc. (BPCI) herewith submits for NRC review proposed Field Change No. 015. This field change will provide a detailed specification for a surface coating for the leachate collection tank pad and secondary containment dike. No specification was provided in the approved closure plan.

Included for your review is a copy of Dames & Moore Technical Advisory No. BUF-004 and manufacturer's information on the surface coating system.

Your concurrence for this proposed field change is requested. This proposed field change has also been submitted to Ohio EPA. If there are any questions, please give me a call at (419) 226-1299.

Sincerely,

William M. Rupert, PE  
Project Manager

cc: Ed Kulzer, USNRC Region 3  
Jim Ottarson, Ohio EPA  
Ruth Vandegriff, ODH

9704110119 961210  
PDR ADOCK 04007604  
C PDR

110010



BP CHEMICALS, INC.  
MIXED WASTE POND CLOSURE PROJECT

**FIELD CHANGE REQUEST FORM**

Field Change Number: 015 Date: 10/9/96

Subject: Coating for Leachate Collection Tank Foundation and Dike

Description: Provide detailed specification for surface coating of concrete foundation and secondary containment for Leachate Collection Tank.

Justification: Detailed specification not included in approved closure plan.

Attachments: Technical Advisory No. BUF-004; Manufacturer's Specifications

Requested by:	<u>R. R. Blickwedehl</u>	<u>Dames &amp; Moore</u>	<u>10/9/96</u>
	Signature	Company	Date

**BPCI Project Approvals**

Dames & Moore	<u>Robert R. Blickwedehl</u>	<u>Yes</u> No	<u>12/6/96</u>
Certifying Engineer	Signature	Approval	Date
BPCI Radiation	<u>NOT APPLICABLE</u>	Yes No	<u>—</u>
Safety Officer	Signature	Approval	Date
BPCI HSE	<u>NOT APPLICABLE</u>	Yes No	<u>—</u>
Manager	Signature	Approval	Date
BPCI Project	<u>W. H. H. H.</u>	<u>Yes</u> No	<u>12/9/96</u>
Manager	Signature	Approval	Date

**Regulatory Agency Concurrence**

Ohio EPA		<u>Yes</u> No	
Concurrence	Signature	Concur	Date
NRC		Yes No	
Concurrence	Signature	Concur	Date

# Technical Advisory



**DAMES & MOORE**

A DAMES & MOORE GROUP COMPANY

3065 Southwestern Boulevard  
Suite 202  
Orchard Park, NY 14127  
716 675 7130 Tel  
716 675 7137 Fax

Job No: 22007-011-120

TA No: BUF-004

Date: October 9, 1996

Subject: Coating for Leachate Collection Tank Foundation and Secondary Containment

Drawing Number	Rev. No.	Date	Detail
Applicable Drawings: D&M-006-101-96 Sh 26	2	9/12/96	1
_____	_____	_____	_____
_____	_____	_____	_____

Section	Date	Section	Date
Applicable Specifications: _____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

The following information is provided to clarify the above referenced documents. This document is not a change order and its implementation will have no affect on the contract price or schedule. (Attach additional pages and documents as needed).

The material to be used for the coating should be General Polymer's 3744 Epoxy Coating. The owner should determine if pigmented coating (3744P) should be used, and, if so, should specify the color. The coating should be applied in accordance with the manufacturer's specifications, which includes the application of General Polymer's 3577 LV primer. While the first coat of the 3744 Epoxy Coating is still wet, 40 to 60 mesh silica sand should be broadcast over horizontal surfaces at a rate of 80 lb/1,000 ft<sup>2</sup>. The second coat should be applied in accordance with the manufacturer's specifications.

The General Polymer's representative for the Lima, Ohio area is Mr. Jim Livingston (216)521-7925.

Initiated by: \_\_\_\_\_

Signature

Date

Approved by:

Signature, Client/Owner

Date

Signature, Engineer of Record

Date

Attachments: none

cc: Field File  
Office File -- BUF  
Office File -- CIN  
Client -- W. Rupert, BP Chemicals, Lima  
Contractor

# General Polymers



## Technical Data Sheet

3744, 3744P

### PRODUCT DESCRIPTION

General Polymers 3744, 3744P <sup>- PIGMENT</sup> NOVO-COTE™ CHEMICAL RESISTANT EPOXY is a 100% solids, two component epoxy coating and binder resin. 3744, 3744P NOVO-COTE CHEMICAL RESISTANT EPOXY may be used directly over approved primed substrates or as a gloss seal coat over decorative, slurry and mortar systems. Its outstanding broad spectrum chemical resistance provides protection in aggressive environments. Available in clear or pigmented.

### ADVANTAGES

- Stain Resistant
- Chemical Resistant
- -0- VOC (Volatile Organic Content)

### TYPICAL USES

3744, 3744P NOVO-COTE CHEMICAL RESISTANT EPOXY should be used in areas where maintenance of a high performance, aesthetically appealing and chemical resistant epoxy system is required. 3744, 3744P NOVO-COTE CHEMICAL RESISTANT EPOXY is 100% solids, and has no offensive solvent odor during installation.

### TYPICAL PHYSICAL PROPERTIES @ 73°F

Mix Ratio A:B	2:1
Color	17 Standard Colors and Clear Computerized custom color matching available upon request
Viscosity, mixed	750 cps
Solids, by volume	100%
VOC (Volatile Organic Content)	- 0 -
Coverage @ 8 mils	200 sq. ft.
Cure Time @ 6 mils	Dry to Touch 8 hours
	Recoat 16 hours min.
	Light Traffic 24 hours min.
	Full Cure 7 days
Abrasion Resistance	0.1 grams lost
ASTM D 4060	
Resistance to Elevated Temperatures	No slip or flow at required temperature of 158°F
MIL D 3134J	
Adhesion	325
ACI 503R	(100% concrete failure, Type I)
Flammability	Self-extinguishing
ASTM D 635	over concrete
Gloss	85 millage pts.
60° Gloss Meter	
@ 73°F, 50% RH	
Impact Resistance	Direct, inch pound greater than 160, passes
MIL-D-3134J	Reverse, inch pound greater than 80, passes

Post-it® Fax Note	7671	Date	# of pages
To: Mark H. Henshaw II		From	
Co./Dept.		Co.	
Phone #		Phone #	
Fax # 75-075-7125		Fax #	

DAVE ALDEN

## LIMITATIONS

- Slab on grade - vapor/moisture barrier.
- Substrate must be naturally sound, dry and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50°F. Substrate temperature must be least 3°F above the dew point (for lower temperature installation contact General Polymers).
- Maximum dry surface temperature not to exceed 160°F.
- Strictly adhere to published coverage rates.

## SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow General Polymers "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

## APPLICATION

### MATERIAL DELIVERY AND STORAGE

Store materials in accordance with General Polymers instructions, with seals and labels intact and legible. Maintain temperature within required range.

### INSTALLATION

General Polymers understands that you want the system installed right the first time. Therefore, an exclusive group of local specialty contractors have been selected by General Polymers for their experience, expertise, stability and, most importantly, their commitment to quality and owner satisfaction.

Materials are to be installed per General Polymers Installation Instructions. Refer to and follow MSDS Safety Recommendations.

NOTE: Epoxy materials may tend to blush at the surface especially in humid environments. After surface is primed and before installation of each subsequent coat, surface must be examined for blush (a whitish greasy film and/or low gloss). The blush must be completely removed prior to recoating using warm detergent water or through solvent wipe.

## CHEMICAL RESISTANCE

For comprehensive chemical resistance information, consult General Polymers Chemical Resistant Guide and contact General Polymers Technical Service Department.

## SKID INHIBITION and EASE OF CLEANING

Skid inhibition and ease of cleaning properties can be adjusted to meet your specific needs. Aggressive skid inhibition makes cleaning more difficult.

## MAINTENANCE

For maintenance information consult General Polymers "Polymer Systems Maintenance Guide".

Caution: Some cleaners will affect the color or texture of your polymer floor surfaces. To determine how your cleaner will perform, General Polymers recommends that you first test each cleaner, in a small area, utilizing your cleaning technique. This precaution will demonstrate the effect of your cleaner and technique. If no deleterious effects are observed, continue with the procedure. If deleterious effects do occur, modify the cleaning material and/or procedure.

SILICA SAND AGGREGATE

3744 P - INDUSTRIAL

- \* BROADCAST - 1<sup>ST</sup> COAT.
- 40-60 MESH SILICA SAND
- CURE 80/100 #/1000 FT<sup>2</sup>
- \* APPLY TOP COAT.

\* 3577 LV PRIMER - HELP SEAL  
OFF COATING CONCRETE.

JIM LIVINGSTON

(216) 521 7925



**WARRANTY**

The sale of General Polymers Corporation's (General Polymers) products are governed by the General Polymers' *Standard Terms and Conditions of Sale*. General Polymers has no knowledge or control concerning buyer's use of the product nor over the quality of the concrete or substrate to which they are applied. General Polymers assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyer. General Polymers makes the following **LIMITED WARRANTY** that its products have been supplied free from manufacturing defects, and will conform to General Polymers manufacturing standards. Technical data furnished by General Polymers is true and accurate to the best of our knowledge; however no guarantee of accuracy is given or implied. This Limited Warranty shall not apply in the case of improper installation, improper substrate construction, damage beyond the scope and protection of the products, exposure of the products to solvents and/or higher concentrations of acids than that for which the products are designed and loss of bond due to hydrostatic pressure, vapor pressure, capillary action or moisture from within, under or adjacent to the concrete surface.

**GENERAL POLYMERS' LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY GENERAL POLYMERS SHALL DISCLOSE, TO GENERAL POLYMERS' SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL GENERAL POLYMERS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. GENERAL POLYMERS MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.**

This Limited Warranty supersedes any other warranty or other representation, whether written or oral, heretofore made between the parties.

Cincinnati, OH  
(513) 761-0011  
(800) 543-7694

Canada  
(800) 543-7694

**General Polymers**

Local Contact:

Sylmar, CA  
(818) 365-9261  
(800) 624-8041

Tampa, FL  
(813) 968-9630

© General Polymers, All Rights Reserved July 1996

GPT 374470  
Page 3 of 3

# General Polymers



## Technical Data Sheet

3740P

### PRODUCT DESCRIPTION

General Polymers 3740P NOVO-FLO™ SOLVENT / ACID RESISTANT COATING is a high-build, 100% solids Novolac epoxy which resists vapor, splash, spillage or immersion to certain aggressive acids, alkalis and solvents. This material bonds aggressively to properly prepared and primed substrates, protecting the substrate from damaging chemicals.

### ADVANTAGES

- Protects against certain aggressive acids, alkalis and solvents. Refer to General Polymers Chemical Resistance Guide.
- High bond strength
- Rapid cure
- Initial high gloss
- Moisture tolerant

### TYPICAL USES

3740P NOVO-FLO SOLVENT / ACID RESISTANT COATING protects primary or secondary containment surfaces in petroleum refineries, chemical processing, water treatment, waste water treatment, power utilities, pulp and paper, food and beverage and pharmaceutical facilities.

### TYPICAL PHYSICAL PROPERTIES @ 73°F

Mix Ratio A:B	2:1
Color	Classic Tile Red and Steel Gray
Viscosity, mixed	1,000 cps
Solids, by volume	100%
VOC (Volatile Organic Content)	- 0 -
Coverage	@ 16 mils 100 sq. ft.
Gloss	85 milage pts.
60° Gloss Meter	
@ 73°F, 50% RH	
Cure Time @ 6 mils	Dry to Touch 8 hours
	Recoat 16 hours
	Light Traffic 24 hours
	Full Cure 7 days
	0.1 grams lost
Abrasion Resistance	
ASTM D 4060	
Hardness, Shore D	80
ASTM D 2240	
Resistance to	No slip or flow at required
Elevated Temperatures	temperature of 158°F
MIL-D-3134J	
Adhesion	335 psi
ASTM D 4541	(100% concrete failure, Type I)
Flammability	Self-extinguishing
ASTM D 635	over concrete

### LIMITATIONS

- Slab on grade requires vapor/moisture barrier
- Substrate must be structurally sound and free of bond inhibiting contaminants.

## LIMITATIONS (cont)

- During installation and initial cure cycle, substrate and ambient air temperature must be at a minimum of 50°F. Substrate temperature must be least 5°F above the dew point (for lower temperature installation contact General Polymers).
- When required, adequate ventilation shall be provided and proper clothing and respirators worn.
- Strictly adhere to published coverage rates.
- Porous concrete substrates require a non carbonating primer, i.e. 3549.

## SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow General Polymers "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

## APPLICATION

### MATERIAL DELIVERY AND STORAGE

Store materials in accordance with General Polymers instructions, with seals and labels intact and legible. Maintain temperature within required range.

### INSTALLATION

General Polymers understands that you want the system installed right the first time. Therefore, an exclusive group of local specialty contractors have been selected by General Polymers for their experience, expertise, stability and, most importantly, their commitment to quality and owner satisfaction.

Materials are to be installed per General Polymers Installation Instructions. Refer to and follow MSDS Safety Recommendations.

NOTE: Epoxy materials may tend to blush at the surface especially in humid environments. After surface is primed and before installation of each subsequent coat, surface must be examined for blush (a whitish greasy film and/or low gloss). The blush must be completely removed prior to recoating using warm detergent water or thorough solvent wipe.

## CHEMICAL RESISTANCE

As chemical usage and exposure vary significantly, consult General Polymers Chemical Resistant Guide and contact General Polymers Technical Service Department for testing and recommendation before installation.

## SKID INHIBITION and EASE OF CLEANING

Skid inhibition and ease of cleaning properties can be adjusted to meet your specific needs. Aggressive skid inhibition makes cleaning more difficult.

## MAINTENANCE

For maintenance information consult General Polymers "Polymer Systems Maintenance Guide".

Caution: Some cleaners will affect the color or texture of your polymer floor surfaces. To determine how your cleaner will perform, General Polymers recommends that you first test each cleaner, in a small area, utilizing your cleaning technique. This precaution will demonstrate the effect of your cleaner and technique. If no deleterious effects are observed, continue with the procedure. If deleterious effects do occur, modify the cleaning material and/or procedure.



**WARRANTY**

The sale of General Polymers Corporation's (General Polymers) products are governed by the General Polymers' *Standard Terms and Conditions of Sale*. General Polymers has no knowledge or control concerning buyer's use of the product nor over the quality of the concrete or substrate to which they are applied. General Polymers assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyer. General Polymers makes the following **LIMITED WARRANTY** that its products have been supplied free from manufacturing defects, and will conform to General Polymers manufacturing standards. Technical data furnished by General Polymers is true and accurate to the best of our knowledge; however no guarantee of accuracy is given or implied. This Limited Warranty shall not apply in the case of improper installation, improper substrate construction, damage beyond the scope and protection of the products, exposure of the products to solvents and/or higher concentrations of acids than that for which the products are designed and loss of bond due to hydrostatic pressure, vapor pressure, capillary action or moisture from within, under or adjacent to the concrete surface.

**GENERAL POLYMERS' LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY GENERAL POLYMERS SHALL DISCLOSE, TO GENERAL POLYMERS' SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL GENERAL POLYMERS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, RODDILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. GENERAL POLYMERS MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.**

This Limited Warranty supersedes any other warranty or other representation, whether written or oral, heretofore made between the parties.

Cincinnati, OH  
(513) 761-0011  
(800) 543-7604

Canada  
(800) 543-7694

**General Polymers**

Local Contact:

Sylmar, CA  
(818) 365-9261  
(800) 624-5041

Tampa, FL  
(813) 968-9630

© General Polymers. All Rights Reserved January 1996

GPT 3740P/A  
Page 3 of 3