



The Chemical Company

PRODUCT DATA

3 03 01 30 Maintenance of
Cast-In-Place
Concrete

APE PILE GROUT

Epoxy grout for use with the APE
(Advanced Pile Encapsulation) System

Description

A-P-E Pile Grout is an aggregate filled epoxy system especially designed for placement by a plural component method, both above and below the waterline. A-P-E Pile Grout is used with the Advance Pile Encapsulation process and other applications where epoxy must be placed in relatively large volumes.

Yield

One five gallon (19 L) unit of Components A plus Component B when mixed with six 50 lb (110 kg) bags of Component C yields approximately 3.18 ft³.

Packaging

Component A: 5 gallon (19 L)
Component B: 5 gallon (19 L) Units
Component C: 50 lb. (110 kg) Bags

Color

Component A = White
Component B = Black
Mixed = Grey

Shelf Life

18 months properly stored in unopened containers

Storage

Store in a cool, dry place [50 to 90°F (10 to 32°C)] away from direct sunlight, flame, or other hazards.

Features

- Marine grade epoxy
- High flow, self leveling formulation

Benefits

Bonds underwater (seawater or fresh) to wood, concrete or steel

Allows the material to be pumped, minimizing handling and clean up

Where to Use

APPLICATION

- Combined with APE jackets to encapsulate structures

LOCATION

- Piers
- Bridges
- Offshore structures
- Dams
- Sea walls

SUBSTRATE

- Concrete
- Steel
- Timber

How to Apply

Application

Methods of surface preparation, application and handling will vary due to the broad scope of specialized applications. For information on estimating, application, pump equipment and further recommendations contact your BASF Building Systems representative.

Clean Up

Mixed epoxy is much easier to clean up before it hardens-solvents such as acetone, methyl ethyl ketone (MEK) and toluene may be used. Commercial epoxy strippers are recommended for hardened epoxy. Consult solvent manufacturer's usage recommendation.



Technical Data

Composition

Three component marine epoxy grout

Physical Properties

PROPERTY	REQUIREMENT
Mix Ratio, by volume	1:1, Part A (hardener) to Part B (resin)
Mix Ratio	3.38:1 Part C (aggregate) to Parts A and B (mixed binder) for pumpable grout, ratio may vary for other applications
Mixing and Handling Time	Unlimited when plural component method is used.
Pot Life after mixing at downstream end of hoses:	1 hour Binder @ 77 °F (25 °C) Full Cure 7 days
Compressive Strength	7000 psi (48.3 MPa) (ASTM C 579) 7 days
Tensile Strength	2000 psi (13.8 MPa) (ASTM C 307) 7 days
Linear Shrinkage	Less than 6/100ths of 1 percent (ASTM C 531) 14 days

NOTES:

Bond Strengths are highly dependent on the application and installation conditions. See your BASF Building Systems representative for related test data.

For Best Performance

- Application temperature cure range is 55° F (13° C)
- To obtain maximum bond strength, local water conditions have to be taken into account and appropriate surface preparation procedures have to be followed.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

Health and Safety

A-P-E PILE GROUT PART A

Warning

Contains epoxy resin, butyl glycidyl ether, ethyl benzene.

Risks

May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation. Suspect cancer hazard. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

Precautions

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Proposition 65

This product contains materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

A-P-E PILE GROUT PART B

DANGER – CORROSIVE

Contains: Polyaminoamide; Nonyl phenol; Diethyltoluenediamine; Tetraethylenepentamine; Tris(2,4,6-dimethylaminomethyl)phenol; Diethylenetriamine.

Risks

Contact with skin or eyes may cause burns. Ingestion may cause irritation and burns of mouth, throat and stomach. Inhalation of vapors may cause irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Repeated or prolonged contact with skin may cause sensitization. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions

DO NOT get in eyes, on skin or clothing. Wash thoroughly after handling. Keep container closed. DO NOT take internally. Use only with adequate ventilation. DO NOT breathe vapors. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.ATTENTION.

Proposition 65

This product does not knowingly contain materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents.

A-P-E PILE GROUT PART C

WARNING!

Contains silica, crystalline quartz.

Risks

May cause skin, eye or respiratory irritation. Ingestion may cause irritation. Contains small free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions

Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Proposition 65

This product contains material listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents.

Product Material Safety Data Sheets (MSDS) are available and should be consulted and on hand whenever handling these products. These products are for professional and industrial use only and are only installed by trained and qualified applicators. Trained applicators must follow installation instructions.

APE PILE GROUT

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Building Systems**

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