



*Stars Management DMCC*

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**SUBMITTAL**

**POLAJOINT**

**(Joint & Crack Sealant)**

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# POLAJOINT™

## Joint & Crack Sealant



### DESCRIPTION

POLAJOINT is a 100% solids, two component, pourable, modified epoxy which forms a semi-hard durable joint compound. It is ideal for filling joints or cracks in concrete or steel infrastructure that have little or modest movement. POLAJOINT remains firm and hard-wearing while accommodating a mild degree of movement in the structure. It is highly resistant to acids, alkalis, solvents and oils, and will maintain adhesion to the surfaces of the joint or crack.

### OUTSTANDING FEATURES

- Maintains performance under high temperature conditions
- Highly resistant to mechanical damage
- Provides protection for wide cracks and joings; has fast cure time
- Exhibits good chemical resistance; prevents chemical seepage into most joints
- Has no shrinkage; produces little odor

### APPLICATION

Caution! Read this entire data sheet before continuing.

All surfaces to be coated must be dry and free of loose debris, oil, paint, grease and other substances

that would interfere with bond. For proper repair of irregular cracks, it may be necessary to router out the crack into a Symmetrical "U" shape. It is advisable to prime highly porous surfaces or very dense concrete surfaces with Polaprime 21. Very deep joints or cracks need to be filled with a proper diameter backer-rod material such as Dow Ethafoam.

In a clean, dry container, mix the complete 2-part unit for at least 5 minutes with low speed mixing. Try not to entrap excessive quantities or air when mixing. After thorough mixing, POLAJOINT may be poured into the crack or joint through a pouring spout or with a refillable caulking gun. Completely fill the crack or joint. It may be necessary to top off the filled crack or joint after a few minutes of

settling and air release takes place. Equipment can be cleaned with xylene or toluene BEFORE the product cures.

### LIMITATIONS

In exterior situations, POLAJOINT will darken in color with time. This will not, however, adversely affect performance. Shelf life is 1 year when stored in tightly sealed containers.

### MAINTENANCE

If a section of repaired joint or a repaired crack becomes damaged, prepare the area thoroughly in accordance with instructions under the Application section of this data sheet. Pour POLAJOINT into the prepared area until it flows to a level contact with the adjoining POLAJOINT areas.

SPECIFICATIONS	
Sealant Type	Urethane epoxy
VOC	Negligible
Pot Life	30 minutes @ 70°F
Shelf Life	12 months
Recommended Thickness	1/2" wide x 1/2" deep
Coverage	125 lineal feet per 12-lb unit
Packaging	12 pound units
Color	Gray

PRODUCT DATA

# POLAJOINT™

## Joint & Crack Sealant



Performance  
Coatings & Sealants  
Systems

### PRECAUTIONS

Gloves, goggles, and barrier cream must be worn during application. Remove skin contamination as soon as possible with a resin remover. In case of eye contact, flush with clear water for

15 minutes and seek immediate medical attention. If ingested, induce vomiting and seek immediate medical attention. Do not eat or smoke while handling this material or in the immediate vicinity before it is fully cured.

**Keep out of reach of children and pets.**

For more information, call our Technical Department.

### TECHNICAL DATA

<b>Working Time</b>	30 minutes @ 70°F	
<b>Cure Time</b>	6 hours @ 70°F	
<b>Total Solids Content (B.W.)</b>	100%	ASTM D-1044
<b>Shore 'A' Hardness</b>	95	ASTM -D-2240
<b>Water Absorption</b>	Zero	ASTM D570-77
<b>Water Vapor Transmission</b>	5.3g/M <sup>2</sup> /24 hours	ASTM E-96
<b>Flashpoint</b>	400°	FTMS 141A(M4293)
<b>Specific Gravity</b>	1.3	ASTM D-792
<b>Chemical Resistance</b>	Excellent	
<b>Elongation</b>	50%	ASTM D-412
<b>Tensile Strength</b>	5,600 psi	ASTM D-412

*NOTICE: The information presented herein is based on tests and data that Andek Corporation believes to be reliable. It is intended for use by technically qualified personnel at their own discretion and risk. Since conditions of handling and use are beyond our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. Nothing herein is to be construed as a license to operate or a recommendation to infringe any patent.*

Effective Date: 11/2012

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**MATERIAL SAFETY DATA SHEET**  
U.S. Department of Labor  
Occupational Safety & Health Administration

**POLAJOINT – PART A**

**SECTION 1 - IDENTIFIERS**

MANUFACTURER: Andek Corporation  
ADDRESS: 850 Glen Avenue, Moorestown, NJ 08057  
TELEPHONE: 1-856-786-6900  
In an emergency, contact CHEMTREC 1-800- 424-9300;  
Outside the United States call +1-703-527-3887  
TRADE NAME: Polajoint - Part A  
CHEMICAL FAMILY: Reaction Products of Epichlorhydrin & Bisphenol 'A' Modified with Isocyanate Prepolymer

**SECTION 2 – HAZARD IDENTIFICATION & EMERGENCY OVERVIEW**

Emergency Overview: Irritating to eyes and skin. May cause sensitization by skin contact. May be toxic to fish. Not biodegradable; potential to bioaccumulate.

Effects of Overexposure:

SKIN: Prolonged or repeated contact may cause skin irritation and/or result in skin sensitization or other allergic response. Slightly toxic by skin absorption.  
EYES: Irritation and redness from direct eye contact  
BREATHING: High temperatures may yield irritating fumes. May cause respiratory tract irritation with symptoms of coughing, sore throat, and shortness of breath.  
SWALLOWING: Low acute oral toxicity (LD50 greater than 2,000 Mg/kg for rats). Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

**SECTION 3 - COMPOSITION**

COMPONENT	CAS #	APPROX %	TLV
Barium Sulfate	7727-43-7	47.4	
Carbon Black	1338-86-4	0.6	
Epoxy Resin	25068-38-6	34.8	
Alkyl Phenol Blocked Isocyanate Prepolymer	84852-15-3	17.2	

**SECTION 4 – FIRST AID MEASURES**

SKIN: Wash thoroughly with soap and water. If clothing or shoes become contaminated, launder clothes and clean shoes before reuse.  
EYES: Irrigate with water for 15 minutes and seek medical attention.  
BREATHING: Move victim to fresh air. If effects occur, consult medical personnel. If breathing is difficult, give oxygen.  
SWALLOWING: If ingested, do NOT induce vomiting unless directed to by medical personnel. Get medical attention.

**SECTION 5 – FIRE & EXPLOSION HAZARD DATA**

FLASH POINT (METHOD USED) : 485°F (Pensky Martens Closed Cup)  
FLAMMABLE LIMITS: N/A  
EXTINGUISHING MEDIA: CO<sub>2</sub>, dry chemical, foam, water spray for large fires  
SPECIAL FIRE FIGHTING PROCEDURES: Standard  
UNUSUAL FIRE & EXPLOSION HAZARDS: None  
DECOMPOSITION PRODUCTS: Thermal decomposition yields oxides of carbon and nitrogen.

**SECTION 6 – SPILL OR LEAK PROCEDURES**

Contain spill with absorbent material. If necessary, soak contaminated area with a 5% acetic acid and wash with water. Clean up area may be slippery; if so, spread sand or grit.

**SECTION 7 – HANDLING & STORAGE**

Store in a dry area away from heat. Keep container sealed until ready for use.

**SECTION 8 – PERSONAL PROTECTION/EXPOSURE CONTROLS**

RESPIRATORY PROTECTION (SPECIFY TYPE): None required under normal conditions of work.  
EYE PROTECTION: Safety glasses with side shields.  
SKIN PROTECTION: Rubber or polyethylene gloves, permeation-resistant clothing.  
OTHER PROTECTIVE EQUIPMENT: Adequate clothing to prevent direct contact to skin.  
PERSONAL HYGIENE: Wash thoroughly after use.

**SECTION 9 - PHYSICAL DATA**

BOILING POINT (F)	Decomposes	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	1.3
VAPOR PRESSURE	N/A	PERCENT, VOLATILE BY VOLUME	None
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (N.B.A.=1)	None
SOLUBILITY IN WATER	Insoluble	pH (5% slurry)	7.5

APPEARANCE & ODOR - Gray paste with slight epoxide odor.

**SECTION 10 – REACTIVITY DATA**

STABILITY: Stable.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal conditions. Fire and high heat may yield CO, CO<sub>2</sub>, and NOX.

HAZARDOUS POLYMERIZATION: May occur at temperatures above 248°F

CONDITIONS TO AVOID: Avoid excessive heating over a long period of time. When large quantities are mixed, high exotherm may result. Avoid mixing with water.

**SECTION 11 TOXICOLOGICAL INFORMATION**

ACUTE ORAL TOXICITY	Moderate
ACUTE INHALATION TOXICITY	Slight
ACUTE DERMAL TOXICITY	Slight
SENSITIZATION	Minimal
MUTAGENICITY	Negative
CARCINOGENICITY	Possible

**SECTION 12 ECOLOGICAL INFORMATION**

BIODEGRADATION	Not Biodegradable
TOXICITY TO FISH	Moderate
TOXICITY TO AQUATIC INVERTEBRATES	Moderate
TOXICITY TO MICRO ORGANISMS	Moderate
ATMOSPHERIC OXIDATION OF VOLATILES	None
BIOACCUMULATION	Some
TOXICITY TO PLANTS	Moderate

**SECTION 13 – DISPOSAL CONSIDERATIONS**

In accordance with local, state and federal environmental regulations in approved metal containers.

**SECTION 14 – TRANSPORT INFORMATION**

PROPER SHIPPING NAME:	Paint
HAZARD CLASS:	None
PACKING GROUP:	N/A
ID#:	N/A
RQ:	N/A

TRANSPORT LABELS REQUIRED: This material is not regulated by the D.O.T.

**SECTION 15 – REGULATORY INFORMATION**

See reference data for individual components.

**SECTION 16 – OTHER INFORMATION (HMIS RATING)**

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	H

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**Disclaimer:** Andek Corporation (Andek) believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the issue date of this Material Safety Data Sheet (MSDS). However, because the conditions of handling, use, and storage of these materials are beyond Andek's control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations contained in this MSDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.

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**MATERIAL SAFETY DATA SHEET**  
U.S. Department of Labor  
Occupational Safety & Health Administration

**POLAJOINT – PART B**

**SECTION 1 - IDENTIFIERS**

MANUFACTURER: Andek Corporation  
ADDRESS: 850 Glen Avenue, Moorestown, NJ 08057  
TELEPHONE: 1-856-786-6900  
In an emergency, contact CHEMTREC 1-800- 424-9300;  
Outside the United States call +1-703-527-3887  
TRADE NAME: Polajoint - Part B  
CHEMICAL FAMILY: Cycloaliphatic Amine Hardener

**SECTION 2 – HAZARD IDENTIFICATION & EMERGENCY OVERVIEW**

Emergency Overview: Toxic gases may be given off during burning or thermal decomposition. Closed container may forcibly rupture under extreme heat or when contents have been contaminated with water. Causes skin and eye irritation and/or burns. May cause allergic skin reaction or skin sensitization. May cause respiratory tract irritation or skin sensitization. May cause respiratory tract irritation, allergic reaction, or sensitization. Causes severe gastrointestinal damage if swallowed.

Effects of Overexposure:

SKIN: Prolonged or repeated contact may cause skin irritation and/or result in skin sensitization or other allergic response.  
EYES: Irritation and redness from direct eye contact  
BREATHING: High temperatures may yield irritating fumes.  
SWALLOWING: Low acute oral toxicity (LD50 greater than 2,000 Mg/kg for rats).

**SECTION 3 - COMPOSITION**

COMPONENT	CAS #	APPROX %	TLV
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	>=30 - <=60	
Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-, reaction products with bisphenol A diglycidyl ether homopolymer	68609-08-5	>=15 - <=40	
Benzyl Alcohol	100-51-6	>=30 - <=60	

**SECTION 4 – FIRST AID MEASURES**

SKIN: Wash thoroughly with soap and water. Launder clothes before reuse.  
EYES: Irrigate with water for 15 minutes and seek medical attention.  
BREATHING: Move victim to fresh air. If effects occur, consult medical personnel.  
SWALLOWING: Induce vomiting if large amount ingested. Low toxicity, no specific antidote.

**SECTION 5 – FIRE & EXPLOSION HAZARD DATA**

FLASH POINT (METHOD USED) : 485°F (Pensky Martens Closed Cup)  
FLAMMABLE LIMITS: N/A  
EXTINGUISHING MEDIA: CO<sub>2</sub>, dry chemical.  
SPECIAL FIRE FIGHTING PROCEDURES: Standard  
UNUSUAL FIRE & EXPLOSION HAZARDS: None  
DECOMPOSITION PRODUCTS: Thermal decomposition yields oxides of carbon and nitrogen.

**SECTION 6 – SPILL OR LEAK PROCEDURES**

Contain spill with absorbent material. If necessary, soak contaminated area with a 5% acetic acid and wash with water. Clean up area may be slippery; if so, spread sand or grit.

**SECTION 7 – HANDLING & STORAGE**

Store in a dry area away from heat. Keep container sealed until ready for use.

**SECTION 8 – PERSONAL PROTECTION/EXPOSURE CONTROLS**

RESPIRATORY PROTECTION (SPECIFY TYPE): During mixing, a NIOSH approved dust mask should be worn, otherwise unnecessary.  
EYE PROTECTION: Safety glasses with side shields.  
SKIN PROTECTION: Rubber or polyethylene gloves.  
OTHER PROTECTIVE EQUIPMENT: Adequate clothing to prevent direct contact to skin.  
PERSONAL HYGIENE: . Wash thoroughly after use.

**SECTION 9 - PHYSICAL DATA**

BOILING POINT (F)	Decomposes	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	1.1
VAPOR PRESSURE	N/A	PERCENT, VOLATILE BY VOLUME	None
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (N.B.A.=1)	None
SOLUBILITY IN WATER	Insoluble	pH (5% slurry)	7.5

APPEARANCE & ODOR - Clear liquid with slight ammoniacal odor.

**SECTION 10 - REACTIVITY DATA**

STABILITY: Stable.

INCOMPATIBILITY (MATERIALS TO AVOID): Avoid strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal conditions.

HAZARDOUS POLYMERIZATION: May not occur.

CONDITIONS TO AVOID: Avoid excessive heating over a long period of time. When large quantities are mixed, high exotherm may result. Avoid mixing with water.

**SECTION 11 TOXICOLOGICAL INFORMATION**

ACUTE ORAL TOXICITY	Moderate
ACUTE INHALATION TOXICITY	Harmful
ACUTE DERMAL TOXICITY	Harmful
SENSITIZATION	Sensitizing
MUTAGENICITY	Not Listed
CARCINOGENICITY	Not Classifiable

**SECTION 12 ECOLOGICAL INFORMATION**

BIODEGRADATION	Not Readily
TOXICITY TO FISH	Moderate
TOXICITY TO AQUATIC INVERTEBRATES	Moderate
TOXICITY TO MICRO ORGANISMS	Moderate
ATMOSPHERIC OXIDATION OF VOLATILES	None
BIOACCUMULATION	Unknown
TOXICITY TO PLANTS	Moderate

**SECTION 13 – DISPOSAL CONSIDERATIONS**

Dispose of in accordance with existing local, state and federal environmental regulations in approved metal containers.

**SECTION 14 – TRANSPORT INFORMATION**

Proper Shipping Name:	Corrosive Liquid N.O.S. (contains isophorone diamine modified aliphatic amine)
Hazard Class:	8
Packing Group:	III
ID #:	UN 1760
RQ:	None

Transport Labels Required: Corrosive Liquid

**SECTION 15 – REGULATORY INFORMATION**

See reference data for individual components.







**SECTION 16 – OTHER INFORMATION (HMIS RATING)**

Health	2
Flammability	1
Physical Hazard	1
Personal Protection	H

**Disclaimer:** Andek Corporation (Andek) believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the issue date of this Material Safety Data Sheet (MSDS). However, because the conditions of handling, use, and storage of these materials are beyond Andek's control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials and make no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations contained in this MSDS are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and data and to comply with all applicable international, federal, state, and local laws and regulations.



## PROJECT REFERENCES

	PROJECT	LOCATION	ANDEK PRODUCT USED
	U.S. Naval Research Lab	Washington DC	Polaroof NW
	Reagan National Control Tower	Reagan National Airport, Washington, DC	Polaroof AC, Wearcoat 66
	Arch Street Presbyterian Church	Philadelphia, PA	Polaprime 21, Polaroof AC
	Trump Building Wall Street (Metal roof)	New York, NY	Polaprime 21, Polaroof AC
	PA DOT-Interstate 476	Pennsylvania	Polagard AG
	McDonnell Douglas (Boeing Aerospace)	New Jersey	Polaroof RAC





John F Kennedy Airport

New York, NY

Polaroof SP, Flashband



LaGuardia Airport

New York, NY

Polaroof SP, Flashband



Throgs Neck Bridge

New York, NY

Roofdx Super, Roofab



Los Angeles Int'l Airport

Los Angeles, CA

Polaroof RAC, Roofab, Polaroof SP



PSE&G Nuclear Power Station

Salem, NJ

Andek 950, Wearcoat 66



Philadelphia Park Horse Stables

Philadelphia, PA

Polaprime 21, Polaroof AC



U.S. Air Force Airlift Command

Dover AFB, DE

Polaroof AC



U.S. Navy (Military Sealift  
Command)

Norfolk, VA

Polaroof SP



Walt Disney World

Orlando, FL

Roofdx Super, Polarroof RAC, Roofab, Polarroof AC, Polarroof NW, Clearcoat 44



The Moshulu

Philadelphia, PA

Polaprime 21, Roofab, Polarroof RAC



Interstate 78

Pennsylvania

Polagard AG



Veteran's Administration Hospitals

Delaware & Palo Alto, CA

Polarroof RAC, Polarroof SP



Jazzland Amusement Park

New Orleans, LA

Polagard AG



NASA Goddard Space Flight Center

Greenbelt, MD

Polarroof RAC, Roofab



National Institutes of Health

Bethesda, MD

Cocoon 560, Cocoon Vinyl Bond B



Harrah's Casino

Atlantic City, NJ

Polaroof AC, Roofdx Copper



General Electric

Burkeville, AL

Cocoon 560, Cocoon Vinyl Bond B



Baltimore/Washington Int'l Airport

BWI Airport, MD

Polaroof NW



U.S. Department of State

Overseas Embassies

Rubberkote 1047



Princeton University

Princeton, NJ

Polaroof AC, Polaroof NW,  
Wearcoat 44, Roofab



U.S. Army Corps of Engineers

Hungry Horse, MT &  
Johnson Atoll

Polajoint



Dupont Corp

Richmond, VA

Polafloor PUR, Wearcoat 44,  
Polafloor Epoxy Topping



Lucy the Elephant

Margate, NJ

Polaroof AC, Polaprime 21



Maryland DOT

Chesapeake House  
Service Center

Polaroof AC, AIM #3



Philadelphia City Hall

Philadelphia, PA

Roofdx Super



Pfizer Pharmaceutical

Philadelphia, PA

Polafloor PUR



Philadelphia Naval Shipyard

Philadelphia, PA

Polaroof AC, Polaroof NW,  
Wearcoat 44, Roofab



University of Texas

Austin, TX

Clearcoat 44



Delaware DOT

Harrington, DE

Polaroof NW



The Ritz Carlton Resort & Golf  
Club

Bradenton, FL

Andek Firegard



Pennsylvania State University  
Wiley Lab

State Park, PA

Cocoon 560, Cocoon Vinyl Bond B



Hershey Park

Hershey, PA

Polafloor Colorcoat



National Italian Foundation HQ

Washington D.C.

Polagard Fibrelastic



Independence Blue Cross/Blue Shield HQ

Philadelphia, PA

Roofdx Super, Polafloor PUR



U.S. Navy - Military Sealift Command

Norfolk, VA

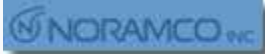
Polaroof SP

**Picatinny**

U.S. Army

Picatinny Arsenal, NJ

Polajoint Super



Noramco Pharmaceuticals

Wilmington, DE

Polaprime 21, Polaroof NW, Clearcoat 44



U.S. Coast Guard

Cape May, NJ

Polaroof SP, Polaroof RAC, Roofab



Bank of America

Baltimore, MD

Polaprime 21, Roofdx Super, Polaroof RAC, Roofab



Blue Cross/ Blue Shield

Columbia, SC

Polagard AG



Osiris Therapeutics

Columbia, MD

Cocoon 560, Cocoon Vinyl Bond B



Delaware "Smoke House" Fire  
Training Facility

Polaprime 21, Wearcoat 44



Kentucky Horse Park-Central  
Show Arena Facility

Lexington, KY

Polaprime 21, Polarof NW



Triborough Bridge & Tunnel  
Authority

New York, NY

Roofdx Super, Roofab, Silver Film



Druid Hill Recreation Center

Baltimore, MD

Wearcoat 44