

MANUFACTURER:

BondPro Corporation
650 Brakke Drive
Hudson, WI 54016
Phone: 715-386-6206
Fax: 715-386-1462

Transportation Emergency
Chemtrec: 800-424-9300

TRADE NAME:

BondPak 2164 Adhesive

This product is a kit which contains both the Part A and Part B independently packaged in a duel cartridge syringe. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page.

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SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION
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MANUFACTURER:

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650 Brakke Drive
Hudson, WI 54016
Phone: 715-386-6206
Fax: 715-386-1462
ISSUED: May 24, 2001

Transportation Emergency
Chemtrec: 800-424-9300

TRADE NAME:

BondPak 2164 Adhesive Part A Translucent Epoxy

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	CAS#	PERCENT
Aliphatic Polymer Diamine	6891-25-1	100.0

SECTION 3. PHYSICAL DATA

BOILING POINT:	N/A
VAPOR DENSITY:	N/A
VAPOR PRESSURE:	N/A
EVAPORATION RATE:	N/A
SOLUBILITY IN WATER:	nil
SPECIFIC GRAVITY:	0.970 Water=1
PERCENT VOLATILE:	0.00% by wt
pH:	N/D
VISCOSITY:	ca. 7000 centipoise
MELTING POINT	N/D
APPEARANCE & ODOR:	
Paste, amber, pungent odor.	

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flash Point	> 200 F
Flammable Limits - LEL	N/A
Flammable Limits - UEL	N/A
Autoignition Temperature:	N/D

EXTINGUISHING MEDIA:

Water, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None known

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FIRE: 0 REACTIVITY: 1 UNUSUAL REACTION HAZARD: NONE

SECTION 5. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY – MATERIALS/CONDITIONS TO AVOID:

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exotherm) with production of intense heat and smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Amine Compounds, Toxic Vapors, Gases or Particulates.

SECTION 6. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Cover with absorbent material. Collect spilled material. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Cure product according to product instructions. Incinerate uncured waste in an industrial or commercial incinerator. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: 43 gms/liter tested per EPA method 24A.
VOC Less H₂O & Exempt Solvents: 32 gms/liter tested per EPA method 24A.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

OTHER ENVIRONMENTAL INFORMATION:

No information was found that adequately describes the environmental properties of this substance.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

SECTION 7. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT:

Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

SECTION 8. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear vented goggles. Where safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: polyethylene/ethylene vinyl alcohol.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for grinding, cutting, or sanding cured material. Curing ovens must be exhausted to outdoors or to a suitable emission control device. Use in a well-ventilated area. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

RECOMMENDED STORAGE:

Store away from heat. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

EXPOSURE LIMITS

<u>INGREDIENT</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TYPE</u>	<u>AUTH</u>	<u>SKIN*</u>
Aliphatic Polymer Diamine	NONE	NONE	NONE	NONE	

*SKIN NOTATION:

Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

-NONE: None Established

SECTION 9. HEALTH HAZARD DATAEYE CONTACT:

Chemical Related Eye Burns (chemical corrosivity) : signs/symptoms can include cloudy appearance of the cornea, chemical burns, pain, tearing, ulcers, impaired vision or loss of vision.

Vapors from heated material may cause eye irritation.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation.

SKIN CONTACT:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Vapors of heated product may cause irritation of the respiratory system.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

BondPak 2164 Adhesive Part A Page 5 of 5

OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may product irritation or any of the health effects listed above when the emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

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Phone: 715-386-6206
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Issued: May 24, 2001

Transportation Emergency
Chemtrec: 800-424-9300

TRADE NAME:

BondPak 2164 Adhesive Part B Translucent Epoxy

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Epoxy Resin	100.0	25068-38-6

SECTION 3. PHYSICAL DATA

BOILING POINT: N/A

VAPOR DENSITY: N/A

VAPOR PRESSURE: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: nil

SPECIFIC GRAVITY: 1.170 Water=1

PERCENT VOLATILE: 0.0% by wt

pH: N/A

VISCOSITY: ca. 14000 centipoise

MELTING POINT: N/D

APPEARANCE & ODOR:
Liquid, transparent, epoxy odor.

SECTION 4. FIRE AND EXPLOSION HAZARD DATA

Flash Point N/A

Flammable Limits - LEL N/A

Flammable Limits - UEL N/A

Autoignition Temperature: N/D

EXTINGUISHING MEDIA:

Water, Carbon dioxide, Dry chemical, Foam

BondPak 2164 Adhesive Part B Page 2 of 5

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None known

NFPA HAZARD CLASSIFICATION

HEALTH: 1 FIRE: 0 REACTIVITY: 1 UNUSUAL REACTION HAZARD:
NONE

SECTION 5. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Acids, Strong Oxidizing Agents. Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exotherm) with production of intense heat and smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Aldehydes, Ketones, Hydrocarbons, Toxic Vapors, Gases or Particulates.

SECTION 6. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Cover with absorbent material. Collect spilled material. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Cure product according to product instructions. Incinerate uncured waste in an industrial or commercial incinerator. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: 0 gm/liter.
VOC Less H₂O & Exempt Solvents: 0 gm/liter.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

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OTHER ENVIROMENTAL INFORMATION:

No information was found that adequately describes the environmental properties of this substance.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

SECTION 7. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

SECTION 8. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear goggles. Where safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material (s) are recommended: polyethylene/ethylene vinyl alcohol.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for grinding, cutting, or sanding cured material. Curing ovens must be exhausted to outdoors or to a suitable emission control device. Use in a well-ventilated area. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

BondPak 2164 Adhesive Part B Page 4 of 5

PREVENTION OF ACCIDENTAL INGESTION:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

RECOMMENDED STORAGE:

Store away from heat. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

EXPOSURE LIMITS

<u>INGREDIENT</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TYPE</u>	<u>AUTH</u>	<u>SKIN*</u>
Epoxy Resin	NONE	NONE	NONE	NONE	

*SKIN NOTATION:

Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

-NONE: None Established

SECTION 9. HEALTH HAZARD DATAEYE CONTACT:

Moderate Eye Irritation : signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

Vapors from heated material may cause eye irritation.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation.

SKIN CONTACT:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Vapors of heated material may cause irritation of the respiratory system.

BondPak 2164 Adhesive Part B Page 5 of 5

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may product irritation or any of the health effects listed above when the emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

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