

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

**SECTION 1. IDENTIFICATION**

Product name : CONAPOXY® FR-1810 Part A Resin

**Manufacturer or supplier's details**

 Company : ELANTAS PDG, INC.  
 5200 North 2nd Street  
 St. Louis MO 63147  
 Telephone : (314) 621-5700  
 Visit our web site : www.elantas.com  
 E-mail address : Todd.Thomas@altana.com  
 Emergency telephone : INFOTRAC - 1-800-535-5053  
 number

**Recommended use of the chemical and restrictions on use**

Recommended use :

Restrictions on use : Refer to Section 15 for any restrictions that may apply

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

 Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Skin sensitisation : Category 1  
 Carcinogenicity : Category 2  
 Specific target organ toxicity : Category 2 (Lungs)  
 - repeated exposure  
 (Inhalation)

**GHS label elements**

Hazard pictograms :



Signal word : Warning

 Hazard statements : H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H351 Suspected of causing cancer.  
 H373 May cause damage to organs (Lungs) through prolonged  
 or repeated exposure if inhaled.

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

Precautionary statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
 P264 Wash skin thoroughly after handling.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P362 Take off contaminated clothing and wash before reuse.

**Storage:**  
 P405 Store locked up.

**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous components**

Component	CAS-No.	Concentration (%)
Epoxy Resin	25085-99-8	>= 38 - < 39
Epoxy diluent	17557-23-2	>= 7 - < 8
Kaolin	1332-58-7	>= 3 - < 4
Triethyl phosphate	78-40-0	>= 3 - < 4
Carbon black	1333-86-4	>= 0.1 - < 1
Phosphoric Acid Polyester	-	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Induce vomiting immediately and call a physician. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**SECTION 5. FIREFIGHTING MEASURES**

Unsuitable extinguishing media	: High volume water jet
Further information	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for	: Soak up with inert absorbent material (e.g. sand, silica gel,

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

containment and cleaning up

acid binder, universal binder, sawdust).  
 Keep in suitable, closed containers for disposal.  
 Absorbent paper or other organic material used for cleaning up resin is a fire hazard, as heat and spontaneous combustion can occur, particularly if the resin was catalyzed. Catalyzed resin can generate hazardous exothermic heat if allowed to polymerize in a mass. All soiled or waste materials must be water soaked, and kept in a closed bin until disposed of.

**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling

: Do not breathe vapours/dust.  
 Avoid exposure - obtain special instructions before use.  
 Avoid contact with skin and eyes.  
 For personal protection see section 8.  
 Smoking, eating and drinking should be prohibited in the application area.  
 Dispose of rinse water in accordance with local and national regulations.  
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
 The chemical reaction that cures mixed epoxy is exothermic (heat generating). If left to cure in a contained mass, such as in a mixing vessel, it can generate enough heat to melt plastic, burn skin or ignite surrounding combustible materials. The larger or thicker the epoxy mass, the more heat generated.

Conditions for safe storage

: Store under conditions specified on the product Technical Data Sheet to maintain product quality.  
 Keep container tightly closed in a dry and well-ventilated place.  
 Observe label precautions.  
 Electrical installations / working materials must comply with the technological safety standards.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Kaolin	1332-58-7	TWA (Respirable fraction)	2 mg/m <sup>3</sup>	ACGIH
		TWA (total)	15 mg/m <sup>3</sup>	OSHA Z-1

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

		dust)		
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
Triethyl phosphate	78-40-0	TWA	7.45 mg/m3	US WEEL
Carbon black	1333-86-4	TWA	3.5 mg/m3	ACGIH
		TWA	3.5 mg/m3	OSHA Z-1

**Engineering measures** : Use with adequate ventilation.  
 All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection  
 Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
 Tightly fitting safety goggles  
 Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
 When using do not smoke.  
 Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

Initial boiling point and boiling range	: No data available
Vapour pressure	: No data available
Flash point	: > 201 °F (> 94 °C) Method: No information available. Information taken from reference works and the literature.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: No data available
Density	: 1.54 g/cm <sup>3</sup> (77 °F (25 °C))
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: > 22 mm <sup>2</sup> /s (104 °F (40 °C))

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous	: No decomposition if stored and applied as directed.

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

reactions

Conditions to avoid : No data available

Hazardous decomposition products : Carbon monoxide in a fire.  
Nitrogen oxides in a fire.**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Acute toxicity****Product:**Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method**Components:****17557-23-2 Epoxy diluent:**

Acute oral toxicity : LD50 (Rat): 4,500 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 2,150 mg/kg

**78-40-0 Triethyl phosphate:**

Acute oral toxicity : LD50 (Rat): 1,165 mg/kg

**Skin corrosion/irritation****Product:**

Remarks: May cause skin irritation and/or dermatitis.

**Components:****17557-23-2 Epoxy diluent:**

Result: Moderate skin irritation

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Components:****17557-23-2 Epoxy diluent:**

Result: Mild eye irritation

**78-40-0 Triethyl phosphate:**

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

Species: Rabbit  
Result: Moderate eye irritation

**Respiratory or skin sensitisation****Product:**

Remarks: Causes sensitisation.

**Carcinogenicity****IARC**

Group 2B: Possibly carcinogenic to humans

Carbon black

1333-86-4

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Further information****Product:**

Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****78-40-0 Triethyl phosphate:**Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l  
Exposure time: 96 hToxicity to daphnia and other : EC50 (Daphnia (water flea)): 330 mg/l  
aquatic invertebrates Exposure time: 96 h**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available



**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation

40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

EPA Hazardous Waste Code(s)

: none

Waste from residues

: Do not dispose of waste into sewer.  
 Do not contaminate ponds, waterways or ditches with chemical or used container.  
 Send to a licensed waste management company.  
 Catalyzed resin can generate hazardous exothermic heat if allowed to polymerize in a mass. All soiled or waste materials must be water soaked, and kept in a closed bin until disposed of.  
 Dispose of the solid mass only if cure is complete and the mass has cooled. Follow federal, state or local disposal regulations.

Contaminated packaging

: Empty remaining contents.  
 Dispose of as unused product.  
 Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION****International Regulations****IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****49 CFR**

Not regulated as a dangerous good

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act****US. EPA CERCLA Hazardous Substances (40 CFR 302)**

Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 - Emergency Release Notification**

This material does not contain any components with a section 304 EHS RQ.

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**

This material does not contain any components with a SARA 302 RQ.

**SARA 311/312 Hazards** : Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

**Non-volatile (Wt)** : Refer to the product technical data sheet for VOC information.

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

**US State Regulations**
**Massachusetts Right To Know**

Kaolin	1332-58-7
--------	-----------

**Pennsylvania Right To Know**

Aluminium hydroxide	21645-51-2
Epoxy Resin	25085-99-8
Epoxy diluent	17557-23-2
Kaolin	1332-58-7
Triethyl phosphate	78-40-0
Phosphoric acid (residual)	7664-38-2

**New Jersey Right To Know**

Aluminium hydroxide	21645-51-2
Epoxy Resin	25085-99-8
Epoxy diluent	17557-23-2
Kaolin	1332-58-7
Triethyl phosphate	78-40-0
Carbon black	1333-86-4

**New Jersey Trade Secret Registry Number for the product (NJ TSRN)** : Not Applicable

**California Prop 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.

Kaolin	1332-58-7
Carbon black	1333-86-4
Cumene (component of Solvent naphtha, petroleum, light aromatic)	98-82-8

**The components of this product are reported in the following inventories:**

TSCA : We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).

Section 4 / 12(b) : Not applicable

Section 5 : Not applicable

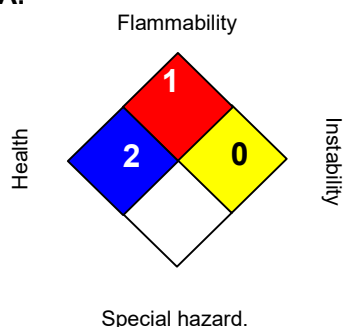
DSL : We certify that all of the components of this product are listed on the DSL.

**CONAPOXY® FR-1810 Part A Resin**

Version 1

Revision Date 11/10/2017

Print Date 11/10/2017

**SECTION 16. OTHER INFORMATION**
**Further information**
**NFPA:**

**HMIS III:**

<b>HEALTH</b>	<b>2*</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Revision Date : 11/10/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

**SECTION 1. IDENTIFICATION**

Product name : CONAPOXY® FR-1810 Part B Hardener

**Manufacturer or supplier's details**

 Company : ELANTAS PDG, INC.  
 5200 North 2nd Street  
 St. Louis MO 63147  
 Telephone : (314) 621-5700  
 Visit our web site : www.elantas.com  
 E-mail address : Todd.Thomas@altana.com  
 Emergency telephone : INFOTRAC - 1-800-535-5053  
 number

**Recommended use of the chemical and restrictions on use**

Recommended use :

Restrictions on use : Refer to Section 15 for any restrictions that may apply

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

 Skin corrosion : Category 1B  
 Serious eye damage : Category 1  
 Skin sensitisation : Category 1  
 Reproductive toxicity : Category 2  
 Specific target organ toxicity : Category 3 (Respiratory system)  
 - single exposure  
 Specific target organ toxicity : Category 2 (Lungs)  
 - repeated exposure  
 (Inhalation)

**GHS label elements**

Hazard pictograms :



Signal word : Danger

 Hazard statements : H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H335 May cause respiratory irritation.

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

## Precautionary statements

H361f Suspected of damaging fertility.

H373 May cause damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

: **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1 %

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**
**Hazardous components**

Component	CAS-No.	Concentration (%)

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6	>= 20 - < 21
1,3-Benzenedimethanamine	1477-55-0	>= 4 - < 5
4-tert-butylphenol	98-54-4	>= 4 - < 5
Tetraethylenepentamine	112-57-2	>= 3 - < 4
Kaolin	1332-58-7	>= 3 - < 4

**SECTION 4. FIRST AID MEASURES**

- General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.  
If on skin, rinse well with water.  
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do NOT induce vomiting.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
Take victim immediately to hospital.

**SECTION 5. FIREFIGHTING MEASURES**

- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Avoid formation of aerosol.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Provide sufficient air exchange and/or exhaust in work rooms.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Store under conditions specified on the product Technical Data Sheet to maintain product quality.  
Keep container tightly closed in a dry and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.



**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1,3-Benzenedimethanamine	1477-55-0	C	0.1 mg/m <sup>3</sup>	ACGIH
		C	0.1 mg/m <sup>3</sup>	NIOSH REL
		C	0.1 mg/m <sup>3</sup>	CAL PEL
Tetraethylenepentamine	112-57-2	TWA	5 mg/m <sup>3</sup>	US WEEL
Kaolin	1332-58-7	TWA (Respirable fraction)	2 mg/m <sup>3</sup>	ACGIH
		TWA (total dust)	15 mg/m <sup>3</sup>	OSHA Z-1
		TWA (respirable fraction)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Total dust)	10 mg/m <sup>3</sup>	OSHA P0
		TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	OSHA P0

**Engineering measures** : Use with adequate ventilation.  
 All application areas should be ventilated in accordance with applicable OSHA regulations. (29 CFR 1910.94)

**Personal protective equipment**

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection  
 Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water  
 Tightly fitting safety goggles  
 Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
 When using do not smoke.

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
Vapour pressure	: No data available
Flash point	: > 201 °F (> 94 °C) Method: No information available. Information taken from reference works and the literature.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: No data available
Density	: 1.54 g/cm <sup>3</sup> (77 °F (25 °C))
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

## Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : > 22 mm<sup>2</sup>/s (104 °F (40 °C))**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Conditions to avoid : No data available

Hazardous decomposition products : Carbon monoxide in a fire.  
Nitrogen oxides in a fire.**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Acute toxicity****Product:**Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation methodAcute inhalation toxicity : Acute toxicity estimate : > 200 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method**Components:****1477-55-0 1,3-Benzenedimethanamine:**

Acute oral toxicity : LD50 (Rat): 930 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.7500 mg/l

Acute dermal toxicity : LD50 (Rabbit): 3,938 mg/kg

**112-57-2 Tetraethylenepentamine:**

Acute oral toxicity : LD50 Oral (Rat): 3,990 mg/kg

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Acute dermal toxicity : LD50 (Rat): 660 mg/kg

**Skin corrosion/irritation****Product:**

Remarks: Extremely corrosive and destructive to tissue.

**Components:****1477-55-0 1,3-Benzenedimethanamine:**

Species: Rabbit

Result: Corrosive to skin

**Serious eye damage/eye irritation****Product:**

Remarks: May cause irreversible eye damage.

**Components:****1477-55-0 1,3-Benzenedimethanamine:**

Species: Rabbit

Result: Corrosive to eyes

**Respiratory or skin sensitisation****Product:**

Remarks: Causes sensitisation.

**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Further information****Product:**

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION****International Regulations**

**IATA-DGR**  
UN/ID No. : UN 1760

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Proper shipping name : Corrosive liquid, n.o.s.  
 (Tetraethylenepentamine, m-Phenylenebis(methylamine))

Class : 8

Packing group : III

Labels : Corrosive

Packing instruction (cargo aircraft) : 856

Packing instruction (passenger aircraft) : 852

**IMDG-Code**

UN number : UN 1760

Proper shipping name : CORROSIVE LIQUID, N.O.S.  
 (TETRAETHYLENEPENTAMINE, m-Phenylenebis(methylamine))

Class : 8

Packing group : III

Labels : 8

EmS Code : F-A, S-B

Marine pollutant : no

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations**
**49 CFR**

UN/ID/NA number : UN 1760

Proper shipping name : Corrosive liquids, n.o.s.  
 (Tetraethylenepentamine, m-Phenylenebis(methylamine))

Class : 8

Packing group : III

Labels : Corrosive

ERG Code : 154

Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION**
**EPCRA - Emergency Planning and Community Right-to-Know Act**
**US. EPA CERCLA Hazardous Substances (40 CFR 302)**

Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 - Emergency Release Notification**

This material does not contain any components with a section 304 EHS RQ.

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**

This material does not contain any components with a SARA 302 RQ.

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

**SARA 311/312 Hazards** : Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with the 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Non-volatile (Wt) : Refer to the product technical data sheet for VOC information.

**US State Regulations**
**Massachusetts Right To Know**

1,3-Benzenedimethanamine	1477-55-0
Tetraethylenepentamine	112-57-2
Kaolin	1332-58-7

**Pennsylvania Right To Know**

Aluminium hydroxide	21645-51-2
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6
1,3-Benzenedimethanamine	1477-55-0
4-tert-butylphenol	98-54-4
Curing Agent	-
Tetraethylenepentamine	112-57-2
Kaolin	1332-58-7

**New Jersey Right To Know**

Aluminium hydroxide	21645-51-2
---------------------	------------

**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

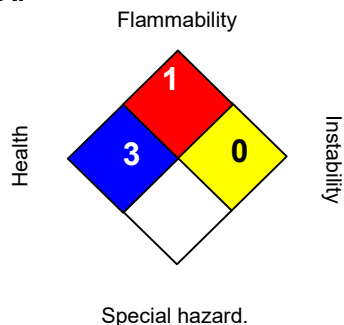
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6
1,3-Benzenedimethanamine	1477-55-0
4-tert-butylphenol	98-54-4
Curing Agent	-
Tetraethylenepentamine	112-57-2
Kaolin	1332-58-7

**New Jersey Trade Secret Registry Number for the product (NJ TSRN)** : Not Applicable

**California Prop 65** : WARNING! This product contains a chemical known to the State of California to cause cancer.  
 Kaolin 1332-58-7

**The components of this product are reported in the following inventories:**

TSCA	: We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).
Section 4 / 12(b)	: Not applicable
Section 5	: Not applicable
DSL	: We certify that all of the components of this product are listed on the DSL.

**SECTION 16. OTHER INFORMATION**
**Further information**
**NFPA:**

**HMIS III:**

<b>HEALTH</b>	<b>3*</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic



**CONAPOXY® FR-1810 Part B Hardener**

Version 0

Revision Date 11/10/2017

Print Date 11/10/2017

Revision Date : 11/10/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.