

# **Epoxylite® C 8096 Hardener**

Version 4 Revision Date 06/22/2016 Print Date 06/22/2016

#### **SECTION 1. IDENTIFICATION**

Product name : Epoxylite® C 8096 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 : Electrical Insulation

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

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 4

Skin irritation : Category 2

Serious eye damage : Category 1

Skin sensitisation : Category 1

Specific target organ toxicity

- single exposure

: Category 3 (Respiratory system, Central nervous system)

Specific target organ toxicity

- repeated exposure

: Category 2 (Kidney)

**GHS** label elements

Hazard pictograms









Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed. H315 Causes skin irritation.



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H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs (Kidney) through prolonged

or repeated exposure.

#### Precautionary statements

#### Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/

equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

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

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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/ eye protection/ face protection.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

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

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

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.

P314 Get medical advice/ attention if you feel unwell.

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

P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam for extinction.

#### Storage:

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

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

## Disposal:

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



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Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical nature : Modified Polyamide Resin Solution

## **Hazardous components**

Component	CAS-No.	Concentration (%)
Polyamide resin	68410-23-1	>= 33 - < 34
2-Butoxyethanol	111-76-2	>= 26 -< 27
Methyl ethyl ketone	78-93-3	>= 26 -< 27
Isopropanol	67-63-0	>= 12 -< 13
Mannich base	90-72-2	>= 1 -< 2
Triethylenetetramine	112-24-3	>= 0 -< 1

#### **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 : Consult a physician after significant exposure.

If unconscious place in recovery position and seek medical

advice.

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 : 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.



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If symptoms persist, call a physician. Take victim immediately to hospital.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemical

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.

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. For safety reasons in case of fire, cans should be stored

separately in closed containments.

Use a water spray to cool fully closed containers.

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.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

## **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Avoid formation of aerosol.



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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.

application area.

Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. 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.

No smoking.

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

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
2-Butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	50 ppm 240 mg/m3	OSHA Z-1
Methyl ethyl ketone	78-93-3	TWA	200 ppm	ACGIH
		STEL	300 ppm	ACGIH
		TWA	200 ppm 590 mg/m3	OSHA Z-1
		TWA	200 ppm 590 mg/m3	OSHA P0
		STEL	300 ppm 885 mg/m3	OSHA P0
Isopropanol	67-63-0	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm	OSHA Z-1



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**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

Boiling point/boiling range : Greater than 99 °F (37 °C)

Vapour pressure : No data available

Flash point : 23 °F (-5 °C)

Method: Literature Value

Upper explosion limit : No data available

Lower explosion limit : No data available



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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 : 0.8867 g/cm3 (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 : Greater than 22 mm2/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.

Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

**Acute toxicity** 



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**Product:** 

Acute oral toxicity : Acute toxicity estimate : 1,675 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : > 40 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 4,219 mg/kg

Method: Calculation method

**Components:** 

68410-23-1 Polyamide resin:

Acute oral toxicity : LD50 (Rat): > 8,000 mg/kg

**111-76-2 2-Butoxyethanol:** 

Acute oral toxicity : LD50 (Rat): 530 mg/kg

LD50 (Rabbit): 520 mg/kg

Acute inhalation toxicity : LC50 (Rat): 10 - 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 220 mg/kg

LD50 (Rabbit): 100 mg/kg

78-93-3 Methyl ethyl ketone:

Acute oral toxicity : LD50 (Rat): 2,737 mg/kg

Acute inhalation toxicity : LC50 (Rat): 20 mg/l

Acute dermal toxicity : LD50 (Rabbit): > 8,000 mg/kg

67-63-0 Isopropanol:

Acute oral toxicity : LD50 (Rat): 5,840 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 12,800 mg/kg

90-72-2 Mannich base:

Acute oral toxicity : LD50 (Rat): 1,200 mg/kg

Acute dermal toxicity : LD50 (Rat): 1,280 mg/kg

112-24-3 Triethylenetetramine:

Acute oral toxicity : LD50 (Rat): 2,500 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 805 mg/kg



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#### Skin corrosion/irritation

#### **Product:**

Remarks: Extremely corrosive and destructive to tissue.

## **Components:**

## 68410-23-1 Polyamide resin:

Species: Rabbit

Result: Moderate skin irritation

# 111-76-2 2-Butoxyethanol:

Species: Rabbit

Result: Moderate skin irritation

## 78-93-3 Methyl ethyl ketone:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

#### 67-63-0 Isopropanol:

Species: Rabbit

Result: Moderate skin irritation

#### 90-72-2 Mannich base:

Species: Rabbit Exposure time: 24 h Method: Draize Test

Result: Severe skin irritation

## 112-24-3 Triethylenetetramine:

Method: OECD Test Guideline 435

Result: Corrosive

#### Serious eye damage/eye irritation

#### **Product:**

Remarks: May cause irreversible eye damage.

## **Components:**

## 68410-23-1 Polyamide resin:

Species: Rabbit

Result: Moderate eye irritation

## 111-76-2 2-Butoxyethanol:

Species: Rabbit Result: Eye irritation

Method: OECD Test Guideline 405



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GLP: yes

#### 78-93-3 Methyl ethyl ketone:

Species: Rabbit Result: Eye irritation

#### 67-63-0 Isopropanol:

Species: Rabbit Result: Eye irritation

## 90-72-2 Mannich base:

Species: Rabbit

Result: Severe eye irritation Exposure time: 24 h Method: Draize Test

# 112-24-3 Triethylenetetramine:

Species: Rabbit

Result: Corrosive to eyes

### Respiratory or skin sensitisation

#### **Product:**

Remarks: Causes sensitisation.

# **Components:**

## 111-76-2 2-Butoxyethanol:

Test Type: Maximisation Test Exposure routes: Dermal Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation.

GLP: yes

## 78-93-3 Methyl ethyl ketone:

Test Type: Buehler Test Exposure routes: Dermal Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation.

GLP: yes

#### 67-63-0 Isopropanol:

Test Type: Buehler Test Exposure routes: Dermal Species: Guinea pig

Method: OECD Test Guideline 406 Result: Does not cause skin sensitisation.

GLP: yes



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#### 112-24-3 Triethylenetetramine:

Test Type: Buehler Test Exposure routes: Dermal Species: Guinea pig

Method: OECD Test Guideline 406

Result: May cause sensitisation by skin contact.

GLP: yes

#### 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:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects.,

Solvents may degrease the skin.

#### **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



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**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 : D001: Ignitable

Code(s) D035: Methyl ethyl ketone

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.

Do not burn, or use a cutting torch on, the empty drum.

#### **SECTION 14. TRANSPORT INFORMATION**

## **International Regulation**

**IATA-DGR** 

UN/ID No. : UN 1866
Proper shipping name : Resin solution

Class : 3 Packing group : II

Labels : Flammable liquid

Packing instruction (cargo

aircraft)

Packing instruction : 353

: 364

(passenger aircraft)

IMDG-Code

UN number : UN 1866

Proper shipping name : RESIN SOLUTION

Class : 3
Packing group : II
Labels : 3



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EmS Code : F-E, <u>S-E</u> 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 1866
Proper shipping name : Resin solution

Class : 3 Packing group : II

Labels : Flammable liquid

ERG Code : 127 Marine pollutant : no

## **SECTION 15. REGULATORY INFORMATION**

## **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Methyl ethyl ketone	78-93-3	5,000	19,176

## **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 : Fire Hazard

Acute Health Hazard Chronic Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This product contains the following toxic chemical(s) subject

to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and

40 CFR part 372.

2-Butoxyethanol 111-76-2 26.0 %

Isopropanol 67-63-0 12.6 %



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#### 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).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

 2-Butoxyethanol
 111-76-2
 26.0 %

 Methyl ethyl ketone
 78-93-3
 26.0 %

 Isopropanol
 67-63-0
 12.6 %

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

## Massachusetts Right To Know

2-Butoxyethanol 111-76-2
Methyl ethyl ketone 78-93-3
Isopropanol 67-63-0

#### Pennsylvania Right To Know

Polyamide resin 68410-23-1 2-Butoxyethanol 111-76-2 Methyl ethyl ketone 78-93-3 Isopropanol 67-63-0

#### **New Jersey Right To Know**

Polyamide resin 68410-23-1
2-Butoxyethanol 111-76-2
Methyl ethyl ketone 78-93-3
Isopropanol 67-63-0
Mannich base 90-72-2

New Jersey Trade Secret Registry Number for the

: NOT APPLICABLE

California Prop 65

product (NJ TSRN)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

reproductive harm.

#### 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



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Section 5 Not applicable

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

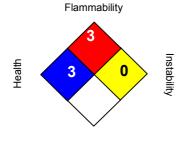
on the DSL.

Bis(dimethylaminomethyl)phenol

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

#### NFPA:



Special hazard.

## HMIS III:

HEALTH	3*
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High 4 = Extreme, \* = Chronic

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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.