

**CONACURE® EA-87 Hardener**

Version 2

Revision Date 08/16/2022

Print Date 08/16/2022

**SECTION 1. IDENTIFICATION**

Product name : CONACURE® EA-87 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](http://www.elantas.com)E-mail address : [Todd.Thomas@altana.com](mailto:Todd.Thomas@altana.com)Emergency telephone : INFOTRAC - 1-800-535-5053  
number**Recommended use of the chemical and restrictions on use**

Recommended use : Curing Agent

Restrictions on use : This product is for industrial use only. It is not intended for  
consumer use or retail sale.  
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 1B

Effects on or via lactation :

Specific target organ toxicity : Category 1 (Respiratory Tract)  
- 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.

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## Precautionary statements

H360 May damage fertility or the unborn child.  
H362 May cause harm to breast-fed children.  
H372 Causes damage to organs (Respiratory Tract) 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.  
P263 Avoid contact during pregnancy/ while nursing.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
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:**  
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**

Chemical nature : Modified Aliphatic Amine

**Hazardous components**

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Component	CAS-No.	Concentration (%)
Polyoxypropyleneamine	9046-10-0	>= 30 - < 60
Nonylphenol	84852-15-3	>= 10 - < 30
Ethyleneamine	140-31-8	>= 10 - < 30
Triethylenetetramine	112-24-3	>= 0.1 - < 1
Diethylenetriamine	111-40-0	>= 0.1 - < 1
2-(2-Aminoethylamino)ethanol	111-41-1	>= 0.1 - < 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 : 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

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- |   |   |
|---|---|
| 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.<br>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.<br>Prevent further leakage or spillage if safe to do so.<br>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).<br>Keep in suitable, closed containers for disposal.                             |

**SECTION 7. HANDLING AND STORAGE**

- |                             |  |
|-----------------------------|--|
| Advice on safe handling     | : Do not breathe vapours/dust.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>To avoid spills during handling keep bottle on a metal tray.<br>Dispose of rinse water in accordance with local and national regulations.<br>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.<br>Keep container tightly closed in a dry and well-ventilated place.<br>Observe label precautions.<br>Electrical installations / working materials must comply with the technological safety standards.  |

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Triethylenetetramine	112-24-3	TWA	1 ppm	US WEEL
Diethylenetriamine	111-40-0	TWA	1 ppm	ACGIH
Diethylenetriamine		TWA	1 ppm 4 mg/m <sup>3</sup>	OSHA P0

Hazardous components without workplace control parameters

**Engineering measures** : Use with adequate ventilation.  
All application areas should be ventilated in accordance with applicable OSHA regulations. (e.g. 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

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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	: 0.96 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
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: > 21 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.

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Conditions to avoid : No data available

Hazardous decomposition products : Carbon monoxide in a fire.  
Nitrogen oxides in a fire.  
Ammonia

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : 4,744 mg/kg  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 3,603 mg/kg  
Method: Calculation method

**Components:****9046-10-0 Polyoxypropyleneamine:**

Acute oral toxicity : LD50 (Rat): 1,100 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 1,560 mg/kg

**84852-15-3 Nonylphenol:**

Acute oral toxicity : LD50 (Rat): 1,882 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 3,160 mg/kg

**140-31-8 Ethyleneamine:**

Acute oral toxicity : LD50 (Rat, male): 2,097 mg/kg  
GLP: no

Acute dermal toxicity : LD50 (Rabbit, male): 866 mg/kg  
GLP: no

**112-24-3 Triethylenetetramine:**

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

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

**111-40-0 Diethylenetriamine:**

Acute oral toxicity : LD50 (Rat): 1,080 mg/kg

Acute inhalation toxicity : LC50 : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): 1,050 mg/kg

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

Remarks: Extremely corrosive and destructive to tissue.

**Components:****9046-10-0 Polyoxypropyleneamine:**

Species: Rabbit

Method: Draize Test

Result: Corrosive

**84852-15-3 Nonylphenol:**

Result: Corrosive

**140-31-8 Ethyleneamine:**

Species: Rabbit

Result: Corrosive

**112-24-3 Triethylenetetramine:**

Method: OECD Test Guideline 435

Result: Corrosive

**111-40-0 Diethylenetriamine:**

Species: Rabbit

Result: Corrosive to skin

**111-41-1 2-(2-Aminoethylamino)ethanol:**

Species: Rabbit

Result: Corrosive to skin

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive

GLP: yes

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

Remarks: May cause irreversible eye damage.

**Components:****9046-10-0 Polyoxypropyleneamine:**

Species: Rabbit

Result: Severe eye irritation

Method: Draize Test

**84852-15-3 Nonylphenol:**

Result: Severe eye irritation

**140-31-8 Ethyleneamine:**

Species: Rabbit

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Result: Risk of serious damage to eyes.

**112-24-3 Triethylenetetramine:**

Species: Rabbit

Result: Corrosive to eyes

**111-40-0 Diethylenetriamine:**

Species: Rabbit

Result: Corrosive to eyes

**111-41-1 2-(2-Aminoethylamino)ethanol:**

Species: Rabbit

Result: Corrosive to eyes

Species: Rabbit

Result: Corrosive

Method: OECD Test Guideline 405

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

Remarks: Causes sensitisation.

**Components:****9046-10-0 Polyoxypropyleneamine:**

Test Type: Buehler Test

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**140-31-8 Ethyleneamine:**

Test Type: Maximisation Test

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: May cause sensitisation by skin contact.

**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

**111-40-0 Diethylenetriamine:**

Test Type: Maximisation Test

Exposure routes: Dermal

Species: Guinea pig

Method: OECD Test Guideline 406

Result: May cause sensitisation by skin contact.

GLP: yes

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**111-41-1 2-(2-Aminoethylamino)ethanol:**

Test Type: Mouse Local Lymph Node assay (LLNA)

Exposure routes: Dermal

Species: Mouse

Method: OECD Test Guideline 429

Result: Causes sensitisation.

GLP: yes

**Germ cell mutagenicity****Components:****84852-15-3 Nonylphenol:**Genotoxicity in vitro : Test Type: Ames test  
Result: negative**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.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**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**

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**

: WC: C

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.

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  
Proper shipping name : Corrosive liquid, n.o.s.  
(Nonylphenol)

Class : 8  
Packing group : II  
Labels : Corrosive  
Packing instruction (cargo aircraft) : 855  
Packing instruction (passenger aircraft) : 851

**IMDG-Code**

UN number : UN 1760  
Proper shipping name : CORROSIVE LIQUID, N.O.S.  
(NONYLPHENOL)

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Marine Pollutant : (NONYLPHENOL)  
Class : 8  
Packing group : II  
Labels : 8  
EmS Code : F-A, S-B  
Marine pollutant : yes

**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 liquid, n.o.s.  
(Nonylphenol)  
Class : 8  
Packing group : II  
Labels : CORROSIVE  
Marine pollutant : yes (Nonylphenol)

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

This material does not contain any components with a CERCLA RQ.

**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.

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**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.

Nonylphenol	84852-15-3	24 %
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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).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM1 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**

No components are subject to the Massachusetts Right to Know Act.

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

**California Prop. 65**

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 : All components of this product are listed active and/or are exempt

: Section 4 / 12(b): Nonylphenol (84852-15-3)

Section 5 Proposed SNUR (Phenol, 4-nonyl, branched – CAS 84852-15-3): Any use other than as an intermediate or epoxy cure catalyst.

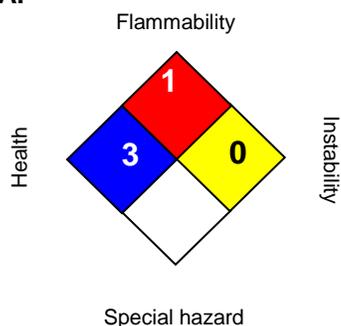
Section 6 : Not applicable

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**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

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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.