

Pedigree® C 59M Hardener

Version 3

Revision Date 08/18/2015

Print Date 08/18/2015

SECTION 1. IDENTIFICATION

Product name : Pedigree® C 59M 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 number : INFOTRAC - 1-800-535-5053

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**

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

Skin sensitisation : Sub-category 1B

GHS Label element

Hazard pictograms :



Signal word : Danger

Hazard statements : H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
P261 Avoid breathing 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/

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face protection.

Response:

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

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

P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/ physician.

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 or doctor/ physician.

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 : Ethyleneamine

Hazardous components

Component	CAS-No.	Concentration (%)
Tetraethylenepentamine	112-57-2	>= 99 - <= 100

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

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- wounds from corrosion of the skin heal slowly and with difficulty.
 Take victim immediately to hospital.
 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.
- 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.

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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 : 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.
 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.

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Tetraethylenepentamine	112-57-2	TWA	5 mg/m ³	US WEEL

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

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

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	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
Initial boiling point and boiling range	: No data available
Flash point	: Greater than 201 °F (94 °C) Method: No information available. Information taken from reference works and the literature.
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative Density/Specific Gravity	: 0.998 (68 °F (20 °C))
Density	: not determined
Solubility(ies) Water solubility	: No data available

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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 mm ² /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****Components:****112-57-2 Tetraethylenepentamine:**

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

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

Skin corrosion/irritation**Product:**

Remarks: Extremely corrosive and destructive to tissue.

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

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Remarks: May cause irreversible eye damage.

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:**

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

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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 2320
Proper shipping name : Tetraethylenepentamine
Class : 8
Packing group : III
Labels : Corrosive
Marine pollutant : no

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 : Acute Health Hazard**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 12 (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.

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US State Regulations**Massachusetts Right To Know**

Tetraethylenepentamine 112-57-2

Pennsylvania Right To Know

Tetraethylenepentamine 112-57-2

New Jersey Right To Know

Tetraethylenepentamine 112-57-2

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 : 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

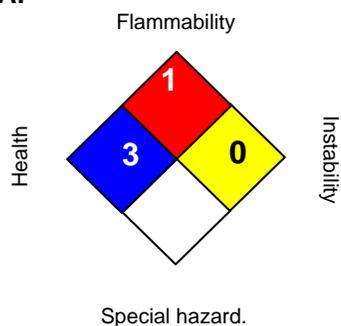
DSL : We certify that all of the components of this product are listed on the DSL.

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SECTION 16. OTHER INFORMATION
Further information
NFPA:

HMIS III:

HEALTH	3
FLAMMABILITY	1
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.