



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

CLIFFORD D. WILSON III
INTERIM SECRETARY

VIA ELECTRONIC MAIL
ElizabethKessler@enecon.com

Ms. Elizabeth Kessler, District Sales Manager
Enecon Corporation
6 Platinum Court
Medford, NY 11763-2251

Subject: Approval of the Enecon Corporation's CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating.
File No. EQ-833

Dear Ms. Kessler:

The Office of District and Business Support has concluded its review of the Equipment Approval request dated October 22, 2014, that was submitted for the Enecon Corporation's CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating, pursuant to Rules 62-762.501(1)(b), 62-762.501(1)(e)3., and 62-762.851(2), Florida Administrative Code (F.A.C.). The Enecon Corporation CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating are 100% solid polymer coatings for tanks and secondary containment systems. The coatings may be used on concrete or metallic surfaces.

Based on the information provided by Enecon Corporation, the CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating provide environmental protection substantially equivalent to that provided by compliance with the requirements established in Rules 62-762.501(1)(b), and 62-762.501(1)(e)3., F.A.C. The Enecon Corporation's CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating may be used as surface coating for tanks and secondary containment systems associated with aboveground or underground storage tank systems.

Pursuant to Rule 62-762.851(2), F.A.C., the request for the use of the Enecon Corporation's CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating is approved in the State of Florida as a surface coating for tanks and secondary containment systems associated with aboveground or underground storage tank systems. The surface preparation and application procedures for the Enecon Corporation's CHEMCLAD-P4C Primer and CHEMCLAD SC Polymer Coating shall be made in accordance with the manufacturer's recommendations.

Please be advised that the above referenced DEP rules are subject to change. If the above rule standards are modified in the future, this order may be modified or rescinded for future upgrades and installations. Additionally, if the product(s) show a consistent pattern of failure(s), and therefore does not provide substantially equivalent environmental protection, the Department may rescind this order.

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57, F.S., within **21** days of receipt of this Order. Persons who have filed such a petition may seek to mediate the dispute and choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning a hearing and pursuing mediation are set forth below.

Persons affected by this Order have the following options:

- A. If you choose to accept the Department's decision regarding the Order, you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.
- B. If you choose to challenge the decision, you may do the following:
 - 1. File a request for an extension of time to file a petition for hearing with the Department's Agency Clerk in the Office of General Counsel within **21** days of receipt of this Order. This request should be made if you wish to meet with the Department in an attempt to resolve any disputes without first filing a petition for hearing or negotiate an agreement to mediate; or
 - 2. File a petition for administrative hearing with the Department's Agency Clerk in the Office of General Counsel within **21** days of receipt of this Order.

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation under Section 120.573, F.S., and must negotiate an agreement to mediate within **10** days after the deadline for filing a petition.

How to Request an Extension of Time to File a Petition for Hearing

For good cause shown, pursuant to Rule 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for hearing. Such a request must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within **21** days of receipt of this Order. Petitioner, if different from the applicant, shall mail a copy of the request to the applicant at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida, 32399-3000, within **21** days of receipt of this Order. Petitioner, if different from the applicant shall mail a copy of the petition to the applicant at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S., and Rule 28-106.201, F.A.C., a petition for administrative hearing shall contain the following information.

- a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any, the site owner's name and address, if different from the petitioner, the DEP facility number, and the name and address of the facility;

- b) A statement of when and how the petitioner received notice of the Department's action or proposed action;
- c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- e) A concise statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- f) A statement of the specific rules or statutes the petitioner contends requires reversal or modification of the Department's action or proposed action; and
- g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

How to Pursue Mediation

In addition to requesting an administrative hearing, any petitioner may elect to pursue mediation. The election may be accomplished by filing with the Department a mediation agreement with all parties to the proceeding (i.e., the applicant, the Department, and any person who has filed a timely and sufficient petition for hearing). The agreement must contain all the information required by Rule 28-106.404, F.A.C. The agreement, signed by all parties, must be received by the Agency Clerk in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000 within **10** days after the deadline for filing a petition, as set forth above. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement.

Pursuant to Rule 28-106.404, F.A.C., an agreement to mediate must include the following.

- (i) The name, address, and telephone number of the persons who may attend the mediation, (also the DEP facility number, the name and address of the facility if applicable);
- (ii) The name, address, and telephone number of the mediator agreed to by the parties;
- (iii) How the costs and fees associated with the mediation will be allocated (the Department will not pay any of the costs of mediation);
- (iv) The agreement of the parties regarding the confidentiality of discussions and documents introduced during mediation to the extent authorized by law;
- (v) The date, time, and place of the first mediation session;
- (vi) The name of the party's representative who shall have authority to settle or recommend settlement; and
- (vii) The signature of the parties.

As provided in Section 120.573, F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57, F.S., for holding an administrative hearing and issuing a final order. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons seeking to protect their substantial interests that would be affected by such a modified final decision must file their petitions within **21** days of receipt of this notice, or they shall be deemed to have waived their right to a proceeding under Sections 120.569 and 120.57, F.S. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57, F.S., are resumed.

This Order is final and effective as of the date it is clerked and filed (see page 5). Timely filing a petition for administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or mediation settlement.

Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Agency Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this order is filed with the clerk of the Department (see below).

Questions

Any questions regarding the Department's review of your equipment approval should be directed to John Svec at (850)245-8845. Questions regarding legal issues should be referred to Rebecca Robinette, Office of General Counsel, at (850)245-2242. Contact with any of the above does not constitute a petition for administrative hearing, a request for a time extension to file a petition for hearing or an agreement to mediate.

Sincerely,



John A. Coates, PE, Assistant Division Director
Division of Waste Management

JAC/js

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52 Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.

12/23/2014

X



Judith Pennington

Signed by: Penningto_JA

Clerk
(or Deputy Clerk)

Date

CHEMCLAD® SC

**Protect surfaces from chemical attack...
All types - Concrete, Rigid Plastics, Tile
Slate, Wood and More!**

- Outstanding Chemical Resistance
- Apply by Brush or Roller
- Unlimited Shelf Life
- 100% Solids
- Simple to Use
- Durable



CHEMCLAD® SC provides extraordinary protection to machinery, equipment and structures in some of the most severe industrial environments.

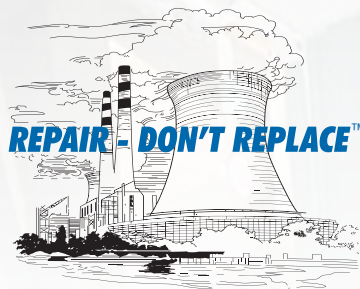


Protects...

- Pipes
- Tanks
- Housings
- Pedestals
- Floors
- Containment Areas

CHEMCLAD® SC is a two component, 100% solids, polymer system used for creating an outstanding corrosion and chemical resistant protective coating on all types of equipment and structures.

CHEMCLAD® SC is simple to use. It mixes easily and can be applied by brush or roller. It is available in different colors to simplify overcoating. This high gloss coating yields a surface that's not only functional, but also aesthetically pleasing. **CHEMCLAD® SC** is also available in 'safety yellow'.



ENECON® Corporation
The Fluid Flow
Systems Specialists.

www.enecon.com

Toll Free: 888-4-ENECON

Tel: 516 349 0022 · Fax: 516 349 5522

Email: info@enecon.com

6 Platinum Court · Medford, NY 11763-2251

Technical Data

Volume capacity per kg.	48 in ³ / 781 cc	
Mixed density	0.044 lbs per in ³ / 1.28 gm per cc	
Coverage rate per kg. @ 6-7 mils.	50 - 55 ft ² / 5 m ²	
Shelf life	Indefinite	
Volume solids	100%	
Mixing ratio	Base	Activator
By volume	5	2
By weight	3.8	1

Cure Times

Ambient Temperature	Working Life	Touch Dry	Maximum Overcoating	Full Cure
41°F 5°C	110 min	55 hrs	96 hrs	10 days
59°F 15°C	90 min	24 hrs	48 hrs	6 days
77°F 25°C	70 min	16 hrs	24 hrs	4 days
86°F 30°C	55 min	8 hrs	16 hrs	3 days

Physical Properties

Typical Values	Test Method
Tensile Shear Adhesion	
Steel 3700 psi	259 kg/cm ² ASTM D-1002
Aluminum 2700 psi	189 kg/cm ² ASTM D-1002
Copper 3000 psi	210 kg/cm ² ASTM D-1002
Stainless steel 3500 psi	245 kg/cm ² ASTM D-1002
Elcometer Adhesion - to properly prepared cementitious surfaces is greater than the cohesive strength of the substrate.	

CHEMCLAD® P4C Technical Data

Theoretical coverage rate per kg. @ 3 mils.			70 - 80 ft ² / 6 - 7 m ²
Mixing ratio	Base	Activator	
-by volume	2	5	
-by weight	2	5	
Ambient Temperature	Working Life	Minimum Overcoating	Maximum Overcoating
41°F 5°C	120 min	16 hrs	48 hrs
59°F 15°C	75 min	12 hrs	36 hrs
77°F 25°C	60 min	8 hrs	24 hrs
86°F 30°C	50 min	5 hrs	16 hrs

Chemical Resistance

Acetic acid (0-10%) G	Methyl ethyl ketone NR
Acetic acid (10-20%) NR	Naptha EX
Acetone NR	Nitric acid (0-10%) G
Aviation fuel (JP-4) EX	Nitric acid (10-20%) G
Butyl alcohol EX	Phenol NR
Calcium chloride EX	Phosphoric acid (0-10%) G
Carbon tetrachloride G	Phosphoric acid (10-20%) G
Chloroform NR	Potassium chloride EX
Crude oil EX	Propyl alcohol EX
Diesel oil EX	Skydrol G
Ethyl alcohol G	Sodium chloride EX
Gasoline EX	Sodium hydroxide EX
Heptane EX	Sulfuric acid (0-10%) EX
Hydrochloric acid (0-10%) EX	Sulfuric acid (10-20%) EX
Hydrochloric acid (10-20%) EX	Toluene NR
Kerosene EX	Trichlorethylene NR
Methyl alcohol G	Xylene G

EX - Suitable for most applications including immersion. G - Suitable for intermittent contact, splashes, etc. NR- Not recommended

Your Local ENECON® Fluid Flow Systems Specialist

Using CHEMCLAD® SC

Surface Preparation - CHEMCLAD® SC should only be applied to clean, firm, dry, and well roughened surfaces.

1. Remove all loose material and surface contamination.
2. Depending on the surface, solvent clean and / or remove contamination by abrasive blasting, steam cleaning, pressure washing or other suitable means.
3. New concrete should be allowed to cure for a minimum of 28 days prior to treatment. Insure that all laitance is removed from cementitious surfaces before applying CHEMCLAD® SC.
4. After removing all surface and sub-surface contamination, flush the area as necessary and allow to dry completely.
5. Metallic surfaces should be abrasive blasted to achieve a 'white metal' finish and a 3 mil profile. Commence the application of the CHEMCLAD® SC immediately upon completion of surface preparation and before any oxidation takes place.

Priming Concrete Surfaces - Prior to applying CHEMCLAD® SC to concrete and / or cementitious substrates, the surface should be treated with CHEMCLAD® P4C to seal the surface, minimize out-gassing and insure that optimum adhesion is obtained. After mixing, CHEMCLAD® P4C should be applied using a brush or roller at the rate of 70 - 80 square feet (6 - 7 square meters) per kilogram to achieve the recommended film thickness of 3 mils.

Note: Coverage will be reduced on very rough and / or porous surfaces.

The application of the CHEMCLAD® SC may commence when the applied CHEMCLAD® P4C reaches its minimum overcoating time and should be completed within its maximum overcoating time as listed in the chart on the left. For additional details concerning the use of the CHEMCLAD® P4C, please refer to the instructions supplied with the material.

Mixing & Application - CHEMCLAD® SC is supplied in pre-measured quantities to simplify mixing of full units. Simply pour the contents of the Activator container into the Base container; then, using the supplied stirrer or a paint mixer in an electric drill, mix thoroughly until a uniform, streak-free color is achieved. Apply the mixed CHEMCLAD® SC to the prepared (and / or primed) surface using a brush, squeegee or roller. As a guide, a coverage rate of 50 - 55 square feet (5 square meters) per kilogram should result in an applied thickness of approximately 6 - 7 mils on a relatively smooth surface.

Note: Shape, contour, porosity, roughness, etc. will affect the coverage obtainable. Since a minimum of two coats are recommended, CHEMCLAD® SC is available in different colors to simplify overcoating.

Health & Safety - Every effort is made to insure that ENECON® products are as simple and safe to use as possible. Normal industry standards and practices for housekeeping, cleanliness and personal protection should be observed. For further information and guidance, please refer to the detailed MATERIAL SAFETY DATA SHEETS (MSDS) supplied with the material and also available on request.

Cleaning of Equipment - Wipe excess material from tools immediately. Use acetone, MEK, isopropyl alcohol or similar solvent as needed.

Technical Support - The ENECON® engineering team is always available to provide technical support and assistance. For guidance on difficult application procedures or for answers to simple questions, call your local ENECON® Fluid Flow Systems Specialist or the ENECON® Engineering Center.

All information contained herein is based on long term testing in our laboratories as well as practical field experience and is believed to be reliable and accurate. No condition or warranty is given covering the results from use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept liability if the desired results are not obtained.

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MATERIAL SAFETY DATA SHEET

Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS regulations

CHEMCLAD P4C Base

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	CHEMCLAD P4C Base
CHEMICAL FAMILY NAME:	Mixture
U.N. NUMBER:	UN3082
U.N. DANGEROUS GOODS CLASS:	Environmentally Hazardous Substances, Liquid, n.o.s (Diglycidyl Ether Bisphenol A Polymer), Class 9, PGIII
SUPPLIER/MANUFACTURER'S NAME:	ENECON Corporation
ADDRESS:	6 Platinum Court, Medford, New York 11763-2251
EMERGENCY PHONE:	800-255-3924 (U.S.A.) 813-248-0585 (International)
BUSINESS PHONE:	516-349-0022
BUSINESS FAX:	516-349-5522
DATE OF PREPARATION:	September 20, 2012
DATE OF LAST REVISION:	May, 2011

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a dark brown liquid with a mild odor. Exposure to this product can be irritating to eyes, respiratory system and skin. It is a non-flammable liquid with a flash point >250°C. The Environmental effects of this product have not been investigated, however it may cause adverse effects.

US DOT SYMBOLS



CANADA (WHMIS) SYMBOLS



NFPA RATING SYSTEM



HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

INHALATION: Inhalation of vapors from heated materials may cause irritation to respiratory tract

EYE CONTACT: Direct contact may cause irritation with pain, burning and tearing.

SKIN CONTACT: Prolonged or repeated contact may cause skin irritation or dermatitis. May also cause skin sensitization.

INGESTION: Not a normal route of entry in normal application, however Ingestion of this product will cause gastrointestinal irritation.

CHRONIC: Prolonged or repeated exposure may cause dermatitis to the skin.

TARGET ORGANS:

ACUTE: Eye, Skin

CHRONIC: Skin

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Bisphenol A Diglycidyl Ether Polymer	25085-99-8	Not Listed in ESIS	Not Listed	>99%	HAZARD CLASSIFICATION: [Xi] Irritant, [N] Dangerous to the Environment RISK PHRASES: R36/38, R50/53
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

SECTION 4 - FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, or eye problems may be aggravated by prolonged contact.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

MATERIAL SAFETY DATA SHEET

CHEMCLAD P4C Base

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: >250°C
FLAMMABILITY CLASS: 111B
AUTOIGNITION TEMPERATURE: Not Established
FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): NA Upper (UEL): NA
FIRE EXTINGUISHING MATERIALS: As appropriate for surrounding fire. Carbon dioxide, foam, dry chemical, halon, or water spray.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustion products may be toxic.
Explosion Sensitivity to Mechanical Impact: Not Sensitive.
Explosion Sensitivity to Static Discharge: Not Sensitive
SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.
SPILLS: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with an absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dusts generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Containers of this product must be properly labeled. Store containers in a cool, dry location. Keep container tightly closed when not in use. Store away from strong acids or oxidizers.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA
Bisphenol A Diglycidyl Ether Polymer	25085-99-8	Not Listed	Not Listed

Currently, International exposure limits are not established for all the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93.

EYE PROTECTION: Safety glasses or chemical goggles where splashing is possible. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

SKIN PROTECTION: Use chemical resistant gloves to prevent skin contact. Use body protection appropriate to prevent skin contact (e.g. lab coat, overalls). If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
APPEARANCE & ODOR: Dark brown liquid with a mild odor.
ODOR THRESHOLD (PPM): None
VAPOR PRESSURE (mmHg): Not Available
VAPOR DENSITY (AIR=1): Not Available
BY WEIGHT: Not Available
EVAPORATION RATE (nBuAc = 1): Not Available
BOILING POINT (C°): >200°C
FREEZING POINT (C°): Not Available
pH: Not Available
SPECIFIC GRAVITY 20°C: (WATER =1) 1.16
SOLUBILITY IN WATER (%) Non-Soluble
VOC: 12 grams/L

MATERIAL SAFETY DATA SHEET

CHEMCLAD P4C Base

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: When heated to decomposition this product may form formaldehyde, carbon dioxide, carbon monoxide and phenolic materials as products of incomplete combustion.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong acids and strong oxidizing agents. Uncontrolled reactions with amines and bases.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with incompatible materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is available for the following components:

CAS# 25085-99-8 Oral LD50 >5000 mg/kg Rat

SUSPECTED CANCER AGENT: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are not considered to be, or suspected to be a cancer-causing agent by these agencies.

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes and respiratory system.

SENSITIZATION OF PRODUCT: This product is considered a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No information concerning the effects of this product and its components on the human reproductive system.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: No Data available at this time.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals, however release of this product may have long term adverse effects to the environment.

EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on this product's effects on aquatic life, however release of this product may have long term adverse effects to the environment.

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Environmentally Hazardous Substances, Liquid, n.o.s (Diglycidyl ether bisphenol A polymer)

HAZARD CLASS NUMBER and DESCRIPTION: Class 9, Environmentally Hazardous Substance

UN IDENTIFICATION NUMBER: UN3082

PACKING GROUP: PGIII

DOT LABEL(S) REQUIRED: Class 9, Environmentally Hazardous Substance

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2004): 171

MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is classified as Dangerous Goods by the International Maritime Organization.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.:

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes

Chronic Health: No

Fire: No

Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): None of the ingredients are on the California Proposition 65 lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

MATERIAL SAFETY DATA SHEET

CHEMCLAD P4C Base

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations and is therefore subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS). Class D Division 2B

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed or Exempt
Australian Inventory of Chemical Substances (AICS):	Listed or Exempt
Korean Existing Chemicals List (ECL):	Listed or Exempt
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed or Exempt
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Listed or Exempt
Swiss Giftlist of Toxic Substances:	Listed or Exempt
U.S. TSCA:	Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett

MSDS Authoring PLUS

Disclaimer: To the best of ENECON Corporation's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type either express or implied are provided. The information contained herein relates only to this specific product.

MATERIAL SAFETY DATA SHEET

Prepared according to U.S. OSHA, CMA, ANSI, Canadian WHMIS regulations

CHEMCLAD P4C Activator

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CHEMCLAD P4C Activator
CHEMICAL FAMILY NAME: Mixture
U.N. NUMBER: None
U.N. DANGEROUS GOODS CLASS: Non-Regulated Material
SUPPLIER/MANUFACTURER'S NAME: ENECON Corporation
ADDRESS: 6 Platinum Court, Medford, New York 11763-2251
EMERGENCY PHONE: 800-255-3924 (U.S.A.)
813-248-0585 (International)
BUSINESS PHONE: 516-349-0022
BUSINESS FAX: 516-349-5522
DATE OF PREPARATION: September 20, 2012
DATE OF LAST REVISION: May 2011

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a white liquid with a slight ammonia odor. May cause severe eye damage. Vapors may be irritating to eyes. May be toxic if absorbed through skin. Inhalation of vapors can be irritating to the respiratory tract. It is a non-flammable liquid with a flash point >95°C. The Environmental effects of this product have not been investigated, however this product may cause adverse effects.

US DOT SYMBOLS

Non-Regulated

CANADA (WHMIS) SYMBOLS



NFPA RATING SYSTEM



HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE:

INHALATION: Inhalation of mists or vapors from heated materials may cause irritation to respiratory tract

EYE CONTACT: May cause severe damage. Vapors may be irritating to eyes.

SKIN CONTACT: May be toxic if absorbed through skin. Sensitization may occur. May cause irritation.

INGESTION: Not a normal route of entry in normal application, however ingestion of this product will cause burns to mouth and throat.

CHRONIC: Prolonged or repeated exposure may cause dermatitis to the skin.

TARGET ORGANS:

ACUTE: Eye, Skin

CHRONIC: Skin

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Water	7732-18-5	231-791-2	Not Listed	55 – 65%	HAZARD CLASSIFICATION: None RISK PHRASES: None
Polyamidoamine Adduct	Proprietary	Not Listed	Not Listed	13 – 22%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36/38
Talc	14807-96-6	238-877-9	0329	5 – 10%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36/38
Titanium Dioxide	13463-67-7	236-675-5	0338	5 – 10%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R36/38
Formaldehyde	50-00-0	200-001-8	0275	0.05 – 0.5%	HAZARD CLASSIFICATION: [T] Toxic, [C] Corrosive RISK PHRASES: R23/24/25, R34, R43
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

SECTION 4 - FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation persists.

SKIN CONTACT: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder before re-use.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

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INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin, or eye problems may be aggravated by prolonged contact.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: >95°C
FLAMMABILITY CLASS: 111B
AUTOIGNITION TEMPERATURE: Not Established
FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): NA Upper (UEL): NA
FIRE EXTINGUISHING MATERIALS: As appropriate for surrounding fire. Carbon dioxide, foam, dry chemical, halon, or water spray.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustion products may be toxic.
Explosion Sensitivity to Mechanical Impact: Not Sensitive.
Explosion Sensitivity to Static Discharge: Not Sensitive
SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations.

SPILLS: Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up with an absorbent material and place in an appropriate container for disposal. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mist/spray/dust generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

STORAGE AND HANDLING PRACTICES: Containers of this product must be properly labeled. Store containers in a cool, dry location. Keep container tightly closed when not in use. Store away from strong acids or oxidizers and reactive materials.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Chemical Name	CAS#	ACGIH TWA	OSHA TWA
Water	7732-18-5	Not Listed	Not Listed
Polyamidoamine Adduct	Proprietary	Not Listed	Not Listed
Talc	14807-96-6	10 mg/m ³	15 mg/m ³
Titanium Dioxide	13463-67-7	10 mg/m ³	15 mg/m ³
Formaldehyde	50-00-0	0.3 ppm	2 ppm

Currently, International exposure limits are not established for all the components of this product. Please check with competent authority in each country for the most recent limits in place.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapors. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93.

EYE PROTECTION: Safety glasses or chemical goggles where splashing is possible. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

SKIN PROTECTION: Use chemical resistant gloves to prevent skin contact. Use body protection appropriate to prevent skin contact (e.g. lab coat, overalls). If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

MATERIAL SAFETY DATA SHEET

CHEMCLAD P4C Activator

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid
APPEARANCE & ODOR:	White liquid with a slight ammonia odor.
ODOR THRESHOLD (PPM):	None
VAPOR PRESSURE (mmHg):	Not Available
VAPOR DENSITY (AIR=1):	<1
BY WEIGHT:	Not Available
EVAPORATION RATE (nBuAc = 1):	Not Available
BOILING POINT (C°):	>100°C
FREEZING POINT (C°):	Not Available
pH:	Not Available
SPECIFIC GRAVITY 20°C: (WATER =1)	1.16
SOLUBILITY IN WATER (%)	Non-Soluble
VOC:	12 grams/L

SECTION 10 - STABILITY and REACTIVITY

STABILITY: Product is stable

DECOMPOSITION PRODUCTS: When heated to decomposition this product may form carbon dioxide, carbon monoxide, and unidentified organic compounds.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with incompatible materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA: Toxicity data is available for the following components:

Polyamidoamine Adduct Oral LD50	>2,000 mg/kg	Rat
CAS# 13463-67-7 Oral LD50	>24,000 mg/kg	Rat

SUSPECTED CANCER AGENT One or more of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore are considered to be, or suspected to be a cancer-causing agent by these agencies.

CAS# 13463-67-7 Titanium Dioxide
IARC Group 2B (possible carcinogen to humans)

CAS# 50-00-0 Formaldehyde
NTP – Confirmed Carcinogen
OSHA – Confirmed Carcinogen
IARC – Group 2A (Confirmed Carcinogen)

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes and respiratory system.

SENSITIZATION OF PRODUCT: This product contains a component that is considered a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: No data is available for the ingredients in this product.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: No Data available at this time.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: No evidence is currently available on this product's effects on plants or animals, however release of this product may cause significant adverse effects.

EFFECT OF CHEMICAL ON AQUATIC LIFE: No evidence is currently available on this product's effects on aquatic life, however release of this product may cause significant adverse effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME: Non-regulated Material – Paint and related materials

HAZARD CLASS NUMBER and DESCRIPTION: None

UN IDENTIFICATION NUMBER: None

PACKING GROUP: None

DOT LABEL(S) REQUIRED: None

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2004): None

MARINE POLLUTANT: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is not classified as Dangerous Goods, per regulations of Transport Canada.

MATERIAL SAFETY DATA SHEET

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INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is not classified as Dangerous Goods by the International Maritime Organization.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows: None

TSCA: All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals.

SARA 311/312:

Acute Health: Yes

Chronic Health: Yes

Fire: No

Reactivity: No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): One or more of the ingredients are on the California Proposition 65 lists.

WARNING! This product contains ingredients that are known to the State of California to cause cancer or reproductive harm.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This is considered to be a hazardous material under the Hazardous Products Act Class D Division 2, as defined by the Controlled Products Regulations and is therefore subject to the labeling and MSDS requirements of the Workplace Hazardous Materials Information System (WHMIS).

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:

Listed or Exempt

Australian Inventory of Chemical Substances (AICS):

Listed or Exempt

Korean Existing Chemicals List (ECL):

Listed or Exempt

Japanese Existing National Inventory of Chemical Substances (ENCS):

Listed or Exempt

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

Listed or Exempt

Swiss Giftlist List of Toxic Substances:

Listed or Exempt

U.S. TSCA:

Listed

SECTION 16 - OTHER INFORMATION

PREPARED BY: Paul Eigbrett

MSDS Authoring PLUS

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