



**Bid Number 50 – 00112406**

**TWO (2) YEAR CONTRACT FOR SUPPLY OF POLYMERS FOR THE  
JEFFERSON PARISH DEPARTMENT OF SEWERAGE**

**BID DUE FEBRUARY 19, 2015 AT 2:00 P.M.**

**ATTENTION VENDORS!!!**

**Please review all pages and respond accordingly, complying with all provisions  
in the technical specifications and Jefferson Parish Instructions for Bidders and  
General Terms and Conditions. All bids must be received in the Purchasing  
Department by the bid due date and time.**

**Jefferson Parish Purchasing Department  
200 Derbigny Street  
General Government Building, Suite 4400  
Gretna, LA 70053  
Buyer Name: Misty A. Camardelle  
Buyer Email: [mcamardelle@jeffparish.net](mailto:mcamardelle@jeffparish.net)  
Buyer Phone: 504-364-2683**

**JEFFERSON PARISH**  
**DEPARTMENT OF SEWERAGE**  
**SPECIFICATIONS FOR POLYMER**

**1.0 GENERAL:**

- 1.1** Specifications for a two year contract for a supply of cationic polymers (Clarifloc CE-293 polymer & Clarifloc C-6254 polymer) for the Department of Sewerage. The quantity shown on this bid represents an approximate quantity to be purchased over the two year period. Actual usage will be on an as needed basis.

**2.0 PRODUCT SPECIFICATIONS:**

- 2.1** The polymers furnished under these specifications will be used for the dewatering of sewerage sludge by using belt filter press. The required polymers are:
- A. Clarifloc C-6254 polymer
  - B. Clarifloc CE-293 polymer
- 2.2** The polymers supplied under these specifications must be a liquid cationic emulsified solution of a high molecular weight flocculants.
- 2.3** The polymers must have good mixing characteristics and produce a minimum of nuisance conditions, such as floating scum or foam.
- 2.4** The polymers shall be suitable for storage in plastic vessels and shall have a shelf life in the storage tank of no less than six months. The freeze-thaw recovery of the polymer shall be at least 90%. The polymers should be mixable with water in all dilutions, and should be able to be diluted to any ratio desired to meet the chemical feed capacity.
- 2.5** The polymers shall have the following general properties:
- Appearance - viscous liquid
  - Solubility - soluble in water in all proportions
- 2.6** The polymers application shall decidedly improve the operation of the belt filter press, and attain the following performance:
- Feed solids - 1.5% - 3.5%
  - Hydraulic loading - 100-300 gpm
  - Minimum cake solids - 16%

Minimum solids capture - 85%

Filtrate quality - less than 1,000 mg/1 tss

**3.0 TESTING PROCEDURE:**

Note: Jefferson Parish reserves the right to require or omit polymer testing based upon polymer performance. If testing is deemed necessary, the following procedures must be adhered to.

- 3.1 The polymers must be compatible with the present feed system at each facility.
- 3.2 Only cationic liquid emulsion polymer products will be accepted for the plant test trial. Anionic or neutral charge, dry solid polymer, and water solution polymers will not be accepted.
- 3.3 The bidder shall use the polymer equipment provided by the department for conducting polymer trial work on the belt filter press.
- 3.4 The department will select one belt filter press on the Eastbank and one belt filter press on the Westbank for running all trials. The same belt filter presses will be used for all trial work as much as possible.
- 3.5 The bidder will provide for the test at least one 10 gallon and one 5 gallon sample to be retained by the department. All polymers used in the trial and sample shall be provided by the bidder at no cost to the parish.
- 3.6 The trial will provide data to estimate polymer dosage, captured solids, filtrate clarity, cake dryness, and also provide operational characteristics of the belt filter press when using the test polymers.
- 3.7 Since the department has a hauling contract for which the cost of disposal is based on the number of wet tons hauled, the performance factor will include an adjustment to reflect cake solids and polymer per ton of solids captured.
- 3.8 At the department's request, the bidder must provide additional testing during the contract period, should performance of polymer become an issue. Additional testing will only be required if performance requirements are not met. The bidder must be willing to adjust and supply the optimal polymer to meet performance requirements.

**4.0 PLANT PERFORMANCE:**

- 4.1 If the polymer consumption during normal operations exceeds the original pounds of polymer per ton of dry solids for the qualifications trial by 20%, the supplier shall respond to such problems at no additional cost to the department.

- 4.2 Jefferson Parish reserves the right to cancel the contract and re-bid if the corrective actions exceed the original dosage rate by 20% for the ten day period.
- 4.3 The department reserves the right to run laboratory and/or plant trials of other polymers during the contract period.

**5.0 TECHNICAL INFORMATION:**

- 5.1 The bidder shall submit OSHA material safety data sheets and polymer products sheets within 10 days after the bid opening to the Purchasing Department.
- 5.2 Upon request, the bidder shall provide the department with a laboratory procedure to determine total active solids in their product during the contract period.
- 5.3 The bidder shall provide the department with technical assistance to develop and maintain optimum dewatering of the sludge with the belt filter presses, while using a minimal polymer dosage.

**6.0 DELIVERY:**

- 6.1 Shipments and partial shipments shall be made by tank truck, according to users need, to the following locations:

Eastbank Wastewater Treatment Plant  
#2 Humane Way  
Harahan, LA 70123

Bridge City Wastewater Treatment Plant  
1400 Highway 90  
Bridge City, LA 70094

Harvey Wastewater Treatment Plant  
2343 Paillet Street  
Harvey, LA 70058

Marrero Wastewater Treatment Plant  
6250 Lapalco Blvd.  
Marrero, LA 70072

- 6.2** Deliveries to the Westbank plants are typically less than a truckload:

Approximately 500 gallons to the Bridge City Plant, approximately 1000 gallons to the Marrero Plant, for and approximately 1000 gallons to the Harvey Plant. Although the department tries to combine and order the three plants at one time, the department reserves the right to order the materials in quantities needed at just one plant.

- 6.3** Deliveries must be made no later than 12 days after orders are placed.
- 6.4** The bidder shall supply the necessary transfer pump and/or equipment to unload the polymer from the tank truck into the storage tanks in a safe and efficient manner.
- 6.5** Certified weight scale tickets attached to the invoices shall substantiate the amount of material delivered.
- 6.6** Invoices with requisition number, copy of delivery tickets with date of delivery, and copy of weight scale tickets should be sent to:

Department Of Sewerage  
1221 Elmwood Park Blvd., Suite 803  
Harahan, LA 70123

DATE: 2/04/2015

INVITATION TO BID  
THIS IS NOT AN ORDER

BID NO.: 50-00112406

**JEFFERSON PARISH**  
PURCHASING DEPARTMENT  
P.O. BOX 9  
GRETN, LA. 70054-0009  
504-364-2678

Page: 1

BUYER: MCamardelle@jeffparish.net

BIDS WILL BE RECEIVED IN THE PURCHASING DEPARTMENT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETN, LA 70053 UNTIL 2:00 PM, 2/19/2015 AND PUBLICLY OPENED THEREAFTER.

**LATE BIDS WILL NOT BE ACCEPTED**

Unless submitting via online (see Page 3), each bid must be submitted in a sealed envelope bearing on the outside; the name of the Bidder, his address, and the name of the project for which the bid is submitted and the bid number.

**NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION.**

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**  
**THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS**

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647.

All vendors submitting bids must register as a Jefferson Parish vendor if not already yet registered. Bidders may be required to furnish current W-9 Forms and respective Tax Identification Numbers within 10 days after bid opening if such information is not on file or not up to date. Forms to register may be downloaded from [www.purchasing.jeffparish.net](http://www.purchasing.jeffparish.net) and clicking on Vendor Information.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing and fax them to the Purchasing Department at (504) 364-2693 no later than FIVE (5) working days prior to bid opening. Bid numbers should be mentioned in all requests. Questions may also be emailed to the buyer for this bid at the email address listed above. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)

DATE: 2/04/2015

BID NO.: 50-00112406

Page: 2

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated.

If the bid exceeds \$30,000.00 and the company is duly authorized to do business in the state of Louisiana, a corporate resolution must be submitted with the bid or the person signing the bid documents must be listed on the Louisiana Secretary of State's website as an officer of the corporation, unless bidder has otherwise complied with LSA-R.S. 38:2212(A)(1)(c) or LSA-R.S. 38:2212 (O). If the bid is in excess of \$30,000 and bidder is registered out of the state of Louisiana, a corporate resolution must be submitted with the bid, unless bidder has otherwise complied with LSA-R.S. 38:2212(A)(1)(c) or LSA-R.S. 38:2212 (O). Failure to comply will cause bid to be rejected; the Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event. Bids submitted by Owner or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. Sole proprietors submitting bids for public works projects shall within 10 days after bid opening submit sole proprietorship certification.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

### INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

**A. AWARD OF CONTRACT:** JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. IN THE EVENT OF SPLIT AWARD, THE PURCHASING DEPARTMENT MAY CONTACT VENDORS TO REQUEST REQUIRED AFFIDAVITS. THOSE VENDORS WILL HAVE 10 DAYS FROM THE DATE OF NOTICE TO SUBMIT COMPLETE, SIGNED AND NOTARIZED AFFIDAVITS IN ORIGINAL FORMATS.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

Preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA-R.S.38:2251-2261"

**B. USE OF BRAND NAMES AND STOCK NUMBERS:** Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

**C. CANCELLATION OF CONTRACT:** JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

**D. PRICES:** Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and Parish taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

DATE: 2/04/2015

BID NO.: 50-00112406

## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

Page: 3

E. RESPONSE TO INVITATION: If your company is unable to bid on this request, please state your reason on bid form, and return to this office before bid opening date. Failure to do so may result in the removal of your company from Jefferson Parish's vendors list.

F. POSTING OF BIDS: A listing of bids will be posted on bulletin board in Suite 4400, Jefferson Parish General Government Building, Gretna, LA and will remain posted until close of respective bids.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

### IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT TO ALL VENDORS

This Electronic Procurement System allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Please note requirements contained in this bid package for electronic bid submission.

Please visit the Purchasing Department webpage at <http://purchasing.jeffparish.net> to register and review Jefferson Parish solicitations.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 dated 12/09/09. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

### ADDITIONAL REQUIREMENTS FOR THIS BID

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE CORRESPONDING INSTRUCTIONS BELOW.

10, 12, 13, 15

1. All bidders must attend the pre-bid conference in relation to this bid; attendance is mandatory. Failure to attend will prohibit a company from submitting a bid. Vendors arriving after the mandatory pre-bid conference begins will not be allowed to sign in as evidence of attendance.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.



## INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS

4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid envelope. Failure to comply will cause the bid to be rejected. Additionally if submitting the bid electronically, then the license number must be entered in the appropriate field in the Electronic Procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.
7. PUBLIC WORKS BIDS: All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. NON-PUBLIC WORKS BIDS: A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. NON-PUBLIC WORKS BIDS: A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. Unless otherwise stated in the bid specifications, the successful bidder will be required to procure standard insurance policies evidencing Parish-mandated insurance requirements as indicted on the attached sheet. The current certificate of insurance must be submitted by low bidder within 10 days after bid opening to the Purchasing Department. Failure to comply will cause bid to be rejected. JEFFERSON PARISH reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, money order, or surety bid bond. If submitting bid online, vendors must submit bond through respective online clearinghouse bond management system as indicated in the Electronic Procurement system.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations or warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits (in Original Format) required; Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit and E-Verify Affidavit must be completed, signed, notarized and submitted by low bidder within 10 days after bid opening to the Purchasing Department on all solicitations for construction, alteration or demolition of public building or project, including but not limited to requirements found in LSA-RS 38:2212.9; LSA-RS 38:2212.10; LSA-RS 38:2224; Code of Ordinances, Jefferson Parish, Louisiana, Sec 2-923.1. Failure to comply will cause bid to be rejected; the Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format for the bid to be considered responsive.
15. NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits (in Original Format) required; Non-Collusion Affidavit, and Campaign Contribution Affidavit must be completed, signed, notarized and submitted by low bidder with bid submission within 10 days after bid opening to the Purchasing Department. See LSA-RS 38:2212.10; LSA-RS 38:2224; Code of Ordinances, Jefferson Parish, Louisiana, Sec 2-923.1 Failure to comply will cause bid to be rejected; the Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event. For the convenience of vendors, all affidavits have been combined into one form entitled NON-PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format for the bid to be considered responsive.

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

DATE: 2/04/2015

Page: 5

BID NO.: 50-00112406

**BID FORM**  
Non Public Works

**All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form**

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES \_\_\_\_\_ NO X

MAXIMUM ESCALATION PERCENTAGE REQUESTED \_\_\_\_\_%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF \_\_\_\_\_.

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

7-12 Days A.R.O.

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable)

N/A

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: Polydyne Inc.

ADDRESS: 1 Chemical Plant Road

CITY, STATE: Riceboro, GA 31323 ZIP: 31323

TELEPHONE: (912) 880-2035 FAX: (912) 880-2078

EMAIL ADDRESS: PolyBiddpt@snfhc.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: None Received  
NUMBER: \_\_\_\_\_  
NUMBER: \_\_\_\_\_  
NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ 416,050.00

AUTHORIZED SIGNATURE: Boyd Stanley

TITLE: Business Manager

Boyd Stanley

Printed Name

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

**NOTE:** All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

**BID NO.: 50-00112406**

**INVITATION TO BID FROM JEFFERSON PARISH - continued**

**SEALED BID**

[illegible]

**CORPORATE RESOLUTION**

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF  
Polydyne Inc.

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INCORPORATED.

AT THE MEETING OF DIRECTORS OF Polydyne Inc.  
INCORPORATED, DULY NOTICED AND HELD ON January 28, 2015,  
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT  
WAS:

RESOLVED THAT Boyd Stanley, BE AND IS HEREBY  
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-  
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON  
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS  
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,  
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE  
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,  
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES  
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS  
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING  
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-  
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE  
A TRUE AND CORRECT COPY OF AN  
EXCERPT OF THE MINUTES OF THE ABOVE  
DATED MEETING OF THE BOARD OF  
DIRECTORS OF SAID CORPORATION, AND  
THE SAME HAS NOT BEEN REVOKED OR  
RESCINDED.



~~SECRETARY-TREASURER~~

Mark Schlag, Vice-President

02/16/15

**DATE**

### **Non-Public Works Bid Affidavit Instructions**

- **Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.**
- **Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.**
- **Affidavit must be notarized or the affidavit will not be accepted.**
- **Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.**
- **Affiant MUST select either A or B when required or the affidavit will not be accepted.**
- **Affiants who select choice A must include an attachment or the affidavit will not be accepted.**
- **If both choice A and B are selected, the affidavit will not be accepted.**
- **Affidavit marked N/A will not be accepted.**
- **It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.**

*Instruction sheet may be omitted when submitting the affidavit*

**Non-Public Works Bid****AFFIDAVIT**STATE OF GEORGIAPARISH/COUNTY OF LIBERTY

BEFORE ME, the undersigned authority, personally came and appeared: Boyd Stanley  
\_\_\_\_\_, (Affiant) who after being by me duly sworn, deposed and said that  
he/she is the fully authorized Business Manager of Polydyne Inc. (Entity),  
the party who submitted a bid in response to Bid Number 50-00112406, to the Parish of  
Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required  
attachment):

Choice A \_\_\_\_\_ Attached hereto is a list of all campaign contributions, including  
the date and amount of each contribution, made to current or  
former elected officials of the Parish of Jefferson by Entity,  
Affiant, and/or officers, directors and owners, including  
employees, owning 25% or more of the Entity during the two-year  
period immediately preceding the date of this affidavit or the  
current term of the elected official, whichever is greater. Further,  
Entity, Affiant, and/or Entity Owners have not made any  
contributions to or in support of current or former members of the  
Jefferson Parish Council or the Jefferson Parish President through  
or in the name of another person or legal entity, either directly or  
indirectly.

Choice B X there are **NO** campaign contributions made which would require  
disclosure under Choice A of this section.

Debt Disclosures

**(Choose A or B, if option A is indicated please include the required attachment):**

**Choice A** \_\_\_\_\_ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.


**Choice B**   X   There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

*[The remainder of this page is intentionally left blank.]*

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

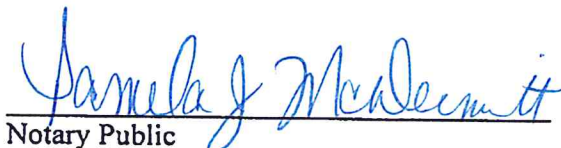
  
Signature of Affiant

Boyd Stanley, Business Manager

Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE 16th DAY OF February, 2015.

  
Notary Public

Pamela J. McDermitt

Printed Name of Notary

N/A  
Notary/Bar Roll Number

My commission expires July 28, 2016

**Pamela J. McDermitt**  
Notary Public  
My Commission Expires July 28, 2016



**INSURANCE REQUIREMENTS - BIDS**

All insurance requirements shall conform to Jefferson Parish Resolution No. 113646 or No. 113647. The contractor shall not commence work under this contract until he has obtained all insurance and complied with the requirements of the specifications and said Parish Resolutions. Except as otherwise provided by law, the Parish Attorney's Office with the concurrence of the Director of Risk Management is authorized to omit in whole or part the insurance requirements of this section in connection with contracts. Vendors inquiring about this shall submit his written request to the Purchasing Department prior to the due date of the bid. Contractor must deliver and maintain such insurances as provided; failure to do so shall be grounds for suspension, discontinuation or termination of the contract.

*Successful bidder will be required to procure standard insurance policies evidencing Parish mandated insurance requirements indicated below. The current certificate of insurance must be submitted by low bidder within 10 days after bid opening to the Purchasing Department. Failure to comply will cause bid to be rejected.*

**1. WORKER'S COMPENSATION INSURANCE**

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

**2. COMMERCIAL GENERAL LIABILITY**

Shall provide limits not less than the following: \$1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

**3. COMPREHENSIVE AUTOMOBILE LIABILITY**

Bodily injury liability \$1,000,000.00 each person; \$1,000,000.00 each occurrence.  
Property Damage Liability \$1,000,000.00 each occurrence.

**DEDUCTIBLES**

No insurance required shall include a deductible not greater than \$10,000.00. The cost of the deductible shall be borne by the contractor.

NOTE: If the vendor requires a change in deductibles, the request must be submitted in writing to the Purchasing Department prior to the due date of the bid. Such request shall be reviewed by the Parish Attorney's Office.

**UMBRELLA LIABILITY COVERAGE**

An umbrella policy or excess may be used to meet minimum requirements.

**CONSTRUCTION AND RENOVATION PROJECTS:**

Unless otherwise specified in the bid, these additional insurance is required. Such insurance is due upon contract execution.

**OWNER'S PROTECTIVE LIABILITY**

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

**BUILDER'S RISK INSURANCE**

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may appear.

**NOTE for CERTIFICATE HOLDER:**

All insurance certificates shall list the certificate holder as follows:

"The Parish of Jefferson, its Districts, Departments and Agencies under the direction of the Parish President and the Parish Council." Additionally, the address on the Certificates should reflect the department which is letting the bid and reference the respective bid number.

Revised 2.10.2014

WRITTEN CONSENT OF THE BOARD OF DIRECTORS  
OF POLYDYNE INC.

The undersigned, being all of the directors of Polydyne, Inc., a Delaware corporation (the "Corporation"), hereby approve and adopt the following resolutions by written consent:

Municipal Contract Authorization

RESOLVED, that Boyd Stanley, René Pich, Peter Nichols, James R. Carlson, Mark Schlag, Bobby Wise and Ken Luke be and hereby are authorized, empowered and directed to bid, in the name of and on behalf of the Corporation, upon such municipal projects as he may deem appropriate; and further

RESOLVED, that Boyd Stanley, René Pich, Peter Nichols, James R. Carlson, Mark Schlag, Bobby Wise and Ken Luke be and hereby are authorized and empowered to execute and deliver, in the name of and on behalf of the Corporation, all documents, instruments, certificates, agreements and papers as he may deem advisable or necessary or proper to effect the Corporation's municipal bids or the transactions contemplated thereby; and further

RESOLVED, that the President, Senior Vice President, Vice President, Secretary, Treasurer, and Assistant Secretary or Director of the Corporation be and hereby is authorized and empowered, and to the extent necessary or advisable, directed, to attest the execution of any document executed pursuant to these resolutions, and to affix the seal of the Corporation thereto, and to certify under seal to any municipality the adoption of these resolutions; and further

RESOLVED, that the authorizations granted under these resolutions shall expire on January 28, 2017.

IN WITNESS WHEREOF, the undersigned, constituting all of the directors of the Corporation, have executed this Consent the 28th day of January, 2015.

René Pich

Peter Nichols

René Hund

Pascal Remy

James R. Carlson

I attest to the authenticity of this copy of the Resolution of the Board of Directors. This resolution is still valid and in effect as of date signed.

Mark Schlag, Vice-President

Date: 02/16/2015



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

2/17/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b>  Frenkel & Company 350 Hudson Street – 4 <sup>th</sup> Floor New York, NY 10014	Phone No.: (212) 488-0200 Fax No.: (212) 488-0220	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C, No, Ext): <b>E-MAIL ADDRESS:</b> <b>PRODUCER CUSTOMER ID#:</b>	<b>FAX</b> (A/C, No):
<b>INSURED</b>  Polydyne Inc. One Chemical Plant Road PO Box 250 Riceboro GA 31323	<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
		<b>INSURER A:</b> AIG SPECIALTY INSURANCE COMPANY	26883
		<b>INSURER B:</b> COMMERCE & INDUSTRY INSURANCE COMPANY	19410
		<b>INSURER C:</b> HARTFORD INSURANCE COMPANY OF THE MIDWEST	37478
		<b>INSURER D:</b>	
		<b>INSURER E:</b>	
		<b>INSURER F:</b>	

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADOL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	X		EG14362834	12/31/2014	12/31/2015	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS-COMP/OP AGG \$ 2,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	X		CA4691818	12/31/2014	12/31/2015	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$	X		EGU18403155	12/31/2014	12/31/2015	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
C	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A	10WNR30600	12/31/2014	12/31/2015	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	<b>OCP</b>			GL4464354	12/31/2014	12/31/2015	Each Occurrence: \$1,000,000 Aggregate: \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

The Parish of Jefferson, its Districts, Departments and Agencies under the direction of the Parish President and the Parish Council are included as Additional Insured under General Liability, Automobile Liability and Umbrella/Excess Liability coverage as required by contract as respects to liability arising out of the operations by the Named Insured, as their interest may appear and subject to the policy terms and conditions.

RE: Bid #50-00112406

90 DAY CANCELLATION CLAUSE INCLUDED

**CERTIFICATE HOLDER****CANCELLATION**

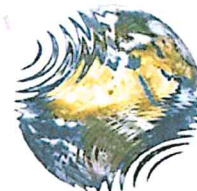
The Parish of Jefferson, its Districts, Departments and Agencies under the direction of the Parish President and the Parish Council  
Purchasing Department - Bid #50-00112406  
200 Derbigny Street  
Gretna, LA 70056

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS

AUTHORIZED REPRESENTATIVE

14-1

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# **CLARIFLOC® C-6254 POLYMER**

## **PRINCIPAL USES**

CLARIFLOC C-6254 is a medium charge cationic polyacrylamide in emulsion form that is used as a flocculant in a wide variety of municipal wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, and dewatering.

## **TYPICAL PROPERTIES**

Physical Form	Clear to Milky White Liquid
Cationicity	50 %
Active Polyacrylamide Min.	41 %
Freezing Point	7° F (-14° C)
Density	8.5 - 8.7 Lbs/gal

## **PREPARATION AND FEEDING**

CLARIFLOC C-6254 is a single component emulsion polymer that must be pre-diluted in water before use. In most cases, this product should not be applied neat. One method for dilution is adding the neat polymer into the vortex of a mixed tank at a concentration between 0.25-1.0% polymer (0.5% is optimum) by weight. The polymer can also be injected through a number of commercially available systems that provide in-line mechanical mixing. The best feed systems use initial high energy mixing (>1000 rpm) for a short time (<30 sec) to achieve good dispersion followed by low energy mixing (<400 rpm) for a longer time (10-30 min). Polymer solutions should be aged for 15-60 minutes for best results. Solution shelf life is 8-16 hours.

## **MATERIALS OF CONSTRUCTION**

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials of construction for bulk tanks. Avoid natural rubber and Buna-N gaskets as these materials swell when placed in contact with neat polymer. Unlined mild steel, black iron, galvanized steel, copper or brass are not recommended in any part of the feed system. Stainless steel, Viton or Teflon are the best choices for pump heads. For feed lines, use PVC or reinforced Tygon tubing.

## **MANUFACTURING SPECIFICATIONS**

Total Solids	46.5 - 53.5%
Residual AcAm	< 1000 ppm
Neat Viscosity	500 - 2000 cPs
UL Viscosity	2.5 - 3.3 cPs

## **HANDLING AND STORAGE**

Suggested in-plant storage life is 6 months in unopened drums. For best results, store at 50-80 F. Bulk tanks should be mixed by periodically recirculating the contents bottom to top. Bulk tanks can also be fitted with an agitator type mixer that reaches the bottom 2 feet of the tank. Drums and bins should be mixed very well before first use and weekly after that. Do not allow emulsion polymers to freeze. Should freezing occur, allow the product to thaw thoroughly in a heated area and mix well before attempting to use it. For spills of CLARIFLOC C-6254, sprinkle vermiculite or equivalent absorbant over the spill area and sweep the material into approved chemical disposal containers. Do not spray water onto a spill because the resulting gel is very difficult to clean up.

## **SAFETY INFORMATION**

CLARIFLOC C-6254 is a mildly acidic product that can irritate the skin and eyes and should be handled accordingly. Gloves, goggles and apron are highly recommended. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling precautions involved. Such information is outlined in the POLYDYNE Material Safety Data Sheet. In the event of an emergency with this product, contact Chemtrec anytime day or night at (800) 424-9300.

## **SHIPPING**

CLARIFLOC C-6254 Polymer is shipped in 55 gallon drums containing approximately 450 pounds net or in 275 gallon tote bins containing 2300 pounds net. Bulk quantities are also available.

**(800) 848-7659**

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

---

**Product name:** **CLARIFLOC C-6254**

**Company:** Polydyne Inc.  
Riceboro, GA 31323  
PO Box 279  
United States

**Telephone:** 1-800-848-7659

**Telefax:** (912)-884-8770

**E-mail:** -

**Emergency telephone number:** 1-800-424-9300

**Product Use:** Processing aid for industrial applications.

## 2. HAZARDS IDENTIFICATION

---

**Appearance and Odor:**

**Form:** Viscous liquid

**Color:** Milky

**Odor:** Aliphatic

**Potential Health Effects:**

See Section 11 for more information.

**Eye:** May cause slight irritation.

**Skin:** Slightly irritating.

**Potential Physical/Chemical Effects:**

Spills produce extremely slippery surfaces.

**OSHA Regulatory Status:**

This material is not considered hazardous in accordance with OSHA 29 CFR 1910.1200.

**Potential Environmental Effects:**

None. See Section 12 for more information.

**Other information** No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Identification:**

Cationic water-soluble polymer in emulsion.

**Regulated Components:**

Chemical Name	CAS Number:	Concentration/ -range:
Distillates (petroleum), hydrotreated light	64742-47-8	20 - 30%
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	69011-36-5	< 5%

**4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air immediately.

**Skin contact:** Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.

**Eye contact:** Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Call a physician immediately.

**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media:** Water. Water spray. Foam. Carbon dioxide (CO<sub>2</sub>). Dry powder.

**Unsuitable extinguishing media:** None.

**Precautions:** Spills produce extremely slippery surfaces.

**Special protective equipment for firefighters:** No special protective equipment required. Wear self contained breathing apparatus for fire fighting if necessary.

**Specific methods:** Keep personnel removed and upwind of fire.

**Specific hazards:** In the event of fire the following can be released: Carbon Oxides. Nitrogen Oxides. Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

**Flash point (°C):** Does not flash.

**Autoignition temperature (°C):** Not applicable.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** No special precautions required. Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection). Keep people away from spill/leak.

**Environmental precautions:** As with all chemical products, do not flush into surface water.

**Methods for cleaning up:** Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.

**Storage:** Keep in a dry cool place (0 - 30 °C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

**Technical measures/Precautions:** No special precautions required.

**Incompatible products:** Oxidising agents.

**Technical measures/Storage conditions:** No special storage conditions required.

## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**Engineering measures:** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

**Personal protective equipment:**

**Respiratory protection:** Not required ; except in case of aerosol formation.

**Hand protection:** PVC or other plastic material gloves.

**Eye protection:** Safety glasses with side-shields. Do not wear contact lenses where this product is used.

**Skin and body protection:** Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Form:</b>	Viscous liquid
<b>Color:</b>	Milky
<b>Odor:</b>	Aliphatic
<b>pH:</b>	4 - 6 @ 5 g/L
<b>Specific Gravity:</b>	1.0 - 1.1
<b>Melting point/range (°C):</b>	< 5
<b>Flash point (°C):</b>	Does not flash.
<b>Boiling point (°C):</b>	> 100
<b>Autoignition temperature (°C):</b>	Not applicable.
<b>Vapor pressure (mm Hg):</b>	2.3 kPa @ 20°C
<b>Viscosity (mPa.s):</b>	See Technical Bulletin
<b>Water solubility:</b>	Completely miscible
<b>LogPow:</b>	Not applicable.
<b>Kinematic viscosity @ 40°C (mm²/s):</b>	> 20.5

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## 10. STABILITY AND REACTIVITY

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**Conditions to avoid:** Avoid extremes of temperature. Protect from light, moisture and damage.

**Stability:** Stable. Hazardous polymerisation does not occur.

**Materials to avoid:** Oxidizing agents may cause exothermic reactions.

**Hazardous decomposition products:** Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO<sub>x</sub>), carbon oxides (CO<sub>x</sub>). Hydrogen cyanide (hydrocyanic acid).

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## 11. TOXICOLOGICAL INFORMATION

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### Product Information

**Acute toxicity:**

**Oral:** LD50/oral/rat > 5000 mg/kg

**Dermal:** LD50/dermal/rat > 5000 mg/kg

**Inhalation:** The product is not expected to be toxic by inhalation.

**Irritation:**

**Skin:** Slightly irritating.

**Eyes:** May cause slight eye irritation.

**Sensitization:** Not sensitizing.

**Mutagenicity:** Not mutagenic.

**Carcinogenicity:** Not carcinogenic.

**Reproductive effects:** Not toxic for reproduction.

**Chronic toxicity:** No chronic effects.

**Other information:** Due to the viscosity, this product does not present an aspiration hazard.

### Component Information

#### Distillates (petroleum), hydrotreated light

**Acute toxicity:**

**Oral:** LD50/oral/rat > 5000 mg/kg (OECD 401)

**Dermal:** LD50/dermal/rabbit > 5000 mg/kg (OECD 402)

**Inhalation:** LC50/inhalation/4 h/rat = 4951 mg/m<sup>3</sup> (OECD 403)

**Irritation:**

**Skin:** Not irritating. (OECD 404) Repeated exposure may cause skin dryness or cracking

**Eyes:** Not irritating. (OECD 405)

**Sensitization:** By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)

**Mutagenicity:** Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)

**Carcinogenicity:** Carcinogenicity study in rats (OECD 451): Negative

**Reproductive effects:** By analogy with similar substances, this substance is not expected to be toxic for reproduction.  
NOAEL/rat = 300 ppm (OECD 421)

**Chronic toxicity:** No chronic effects.

**Other information:** May be fatal if swallowed and enters airways.

**Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched**

**Acute toxicity:**

**Oral:** LD50/oral/rat = 200 - 300 mg/kg

**Dermal:** LD50/dermal/rabbit > 2000 mg/kg

**Inhalation:** No data available.

**Irritation:**

**Skin:** Not irritating.

**Eyes:** Causes serious eye irritation

**Sensitization:** The results of testing on guinea pigs showed this material to be non-sensitizing.

**Mutagenicity:** Not mutagenic.

**Carcinogenicity:** Not carcinogenic.

**Reproductive effects:** Two-Generation Reproduction Toxicity (OECD 416)  
NOAEL/rat > 250 mg/kg/day Prenatal Development Toxicity Study (OECD 414)  
NOAEL/Maternal toxicity/rat > 50 mg/kg/day  
NOAEL/Developmental toxicity/rat > 50 mg/kg/day

**Chronic toxicity:** NOAEL/oral/rat/600 days = 50 mg/kg/day

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## 12. ECOLOGICAL INFORMATION

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### Product Information

**Aquatic toxicity:**

**Toxicity to fish:** LC50/Fish/96 hours = 10 - 100 mg/L (Estimated)

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**Toxicity to daphnia:** EC50/Daphnia/48 hours = 10 - 100 mg/L (Estimated)

**Toxicity to algae:** Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable.

**Hydrolysis:** At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

**Bioaccumulation:** The product is not expected to bioaccumulate.

**LogPow:** Not applicable.

**LogKow:** Not determined.

#### **Component Information**

##### **Distillates (petroleum), hydrotreated light**

**Acute toxicity to fish:**

**Toxicity to fish:** LC0/Oncorhynchus mykiss/96 hours > 1000 mg/L (OECD 203)

**Toxicity to daphnia:** EC0/Daphnia magna/48 hours > 1000 mg/L (OECD 202)

**Toxicity to algae:** IC0/Pseudokirchneriella subcapitata/72 hours > 1000 mg/L (OECD 201)

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable.

**Hydrolysis:** Does not hydrolyse.

**Bioaccumulation:** The product is not expected to bioaccumulate.

**LogPow:** 3 - 6

**LogKow:** Not determined.

##### **Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched**

**Toxicity to fish:** LC50/Cyprinus carpio/96 hours = 1 - 10 mg/L (OECD 203)

**Toxicity to daphnia:** EC50/Daphnia/48 hours = 1 - 10 mg/L (OECD 202)

**Toxicity to algae:** IC50/Desmodesmus subspicatus/72 hours = 1 - 10 mg/L (OECD 201)

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable. > 60% / 28 days (OECD 301 B)

**Hydrolysis:** Does not hydrolyse.

**Bioaccumulation:** No data available

**LogPow:** > 3

**LogKow:** Koc > 5000

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### 13. DISPOSAL CONSIDERATIONS

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**Disposal:** Dispose of in accordance with local, state and federal regulations.

**Container:** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, state and federal regulations.

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### 14. TRANSPORT INFORMATION

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**DOT:**

Not classified as dangerous in the meaning of DOT regulations.

**IMDG/IMO:**

Not classified as dangerous in the meaning of IMO/IMDG regulations.

**ICAO/IATA:**

Not classified as dangerous in the meaning of ICAO/IATA regulations.

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### 15. REGULATORY INFORMATION

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**Product Information**

**US SARA Reporting Requirements:** None.

**RCRA status :** Not RCRA hazardous.

**SARA (Section 311/312) hazard class:** Not concerned.

**California Proposition 65 Information:** WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

**International Inventories:**

**USA (TSCA):** All components of this product are either listed on the inventory or are exempt from listing.

**Canada (DSL):** All components of this product are either listed on the inventory or are exempt from listing.

**China (IECSC):** All components of this product are either listed on the inventory or are exempt from listing.

**European Union (REACH):** All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

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**Australia (AICS):** All components of this product are either listed on the inventory or are exempt from listing.

**Japan (ENCS):** All components of this product are either listed on the inventory or are exempt from listing.

**Korea (ECL):** All components of this product are either listed on the inventory or are exempt from listing.

**Philippines (PICCS):** All components of this product are either listed on the inventory or are exempt from listing.

**Taiwan (CSNN):** All components of this product are either listed on the inventory or are exempt from listing.

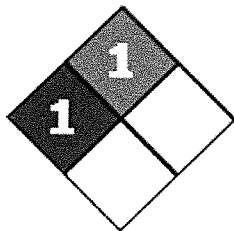
**New Zealand (NZIoC):** All components of this product are either listed on the inventory or are exempt from listing.

## **16. OTHER INFORMATION**

### **NFPA and HMIS Ratings :**

#### **NFPA:**

Health:	1
Flammability:	1
Instability:	0



#### **HMIS:**

Health:	1
Flammability:	1
Physical Hazard:	0
PPE Code:	B

### **This MSDS was prepared in accordance with the following:**

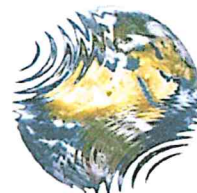
ISO 11014-1: Material Safety Data Sheet for Chemical Products

ANSI Z400.1-2004; Material Safety Data Sheets - Preparation

**Revision Number:** 14.01a

ENCC004

The data in this Material Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained. 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.



# **CLARIFLOC® CE-293 POLYMER**

## **PRINCIPAL USES**

CLARIFLOC CE-293 is a **high** charge cationic polyacrylamide in emulsion form that is used as a flocculant in a wide variety of municipal wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, and dewatering.

## **TYPICAL PROPERTIES**

Physical Form	Clear to Milky White Liquid
Density	8.5 - 8.7 lbs/gal
Specific Gravity	1.02 - 1.04
Cationicity	60 %
Active Polyacrylamide Min.	42 %
Freezing Point	7 F. (-14 C.)

## **PREPARATION AND FEEDING**

CLARIFLOC CE-293 is a single component emulsion polymer that must be pre-diluted in water before use. In most cases, this product should not be applied neat. One method for dilution is adding the neat polymer into the vortex of a mixed tank at a concentration between 0.25-1.0% polymer (0.5% is optimum) by weight. The polymer can also be injected through a number of commercially available systems that provide in-line mechanical mixing. The best feed systems use initial high energy mixing (>1000 rpm) for a short time (<30 sec) to achieve good dispersion followed by low energy mixing (<400 rpm) for a longer time (10-30 min). Polymer solutions should be aged for 15-60 minutes for best results. Solution shelf life is 8-16 hours.

## **MATERIALS OF CONSTRUCTION**

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials of construction for bulk tanks. Avoid natural rubber and Buna-N gaskets as these materials swell when placed in contact with neat polymer. Unlined mild steel, black iron, galvanized steel, copper or brass are not recommended in any part of the feed system. Stainless steel, Viton or Teflon are the best choices for pump heads. For feed lines, use PVC or reinforced Tygon tubing.

## **MANUFACTURING SPECIFICATIONS**

Total Solids	45 - 52 %
Residual AcAm	< 1000 ppm
Neat Viscosity	500 - 2000 cPs
UL Viscosity	3.3 - 4.3 cPs

## **HANDLING AND STORAGE**

Suggested in-plant storage life is 12 months in unopened drums. For best results, store at 50-80 F. Bulk tanks should be mixed by periodically recirculating the contents bottom to top. Bulk tanks can also be fitted with an agitator type mixer that reaches the bottom 2 feet of the tank. Drums and bins should be mixed very well before first use and weekly after that. Do not allow emulsion polymers to freeze. Should freezing occur, allow the product to thaw thoroughly in a heated area and mix well before attempting to use it. For spills of CLARIFLOC CE-293, sprinkle vermiculite or equivalent absorbant over the spill area and sweep the material into approved chemical disposal containers. Do not spray water onto a spill because the resulting gel is very difficult to clean up.

## **SAFETY INFORMATION**

CLARIFLOC CE-293 is a mildly acidic product that can irritate the skin and eyes and should be handled accordingly. Gloves, goggles and apron are highly recommended. Anyone responsible for the procurement, use or disposal of this product should familiarize themselves with the appropriate safety and handling precautions involved. Such information is outlined in the **POLYDYNE** Material Safety Data Sheet. In the event of an emergency with this product, contact Chemtrec anytime day or night at (800) 424-9300.

## **SHIPPING**

CLARIFLOC CE-293 Polymer is shipped in 55 gallon drums containing 450 pounds net or in 275 gallon totes containing 2300 pounds net. Bulk quantities are also available.

## **ADDITIONAL INFORMATION**

To place an order or obtain technical information from anywhere in the continental United States, call toll free:

**(800) 848-7659**

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

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**Product name:** **CLARIFLOC CE-293**

**Company:** Polydyne Inc.  
Riceboro, GA 31323  
PO Box 279  
United States

**Telephone:** 1-800-848-7659

**Telefax:** (912)-884-8770

**E-mail:** -

**Emergency telephone number:** 1-800-424-9300

**Product Use:** Processing aid for industrial applications.

## 2. HAZARDS IDENTIFICATION

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**Appearance and Odor:**

**Form:** Viscous liquid

**Color:** Milky

**Odor:** Aliphatic

**Potential Health Effects:**

See Section 11 for more information.

**Eye:** May cause slight irritation.

**Skin:** Slightly irritating.

**Potential Physical/Chemical Effects:**

Spills produce extremely slippery surfaces.

**OSHA Regulatory Status:**

This material is not considered hazardous in accordance with OSHA 29 CFR 1910.1200.

**Potential Environmental Effects:**

None. See Section 12 for more information.

**Other information** No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Identification:**

Cationic water-soluble polymer in emulsion.

**Regulated Components:**

Chemical Name	CAS Number:	Concentration/ -range:
Distillates (petroleum), hydrotreated light	64742-47-8	20 - 30%
Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched	69011-36-5	< 5%

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**4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air immediately.

**Skin contact:** Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.

**Eye contact:** Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Call a physician immediately.

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**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media:** Water. Water spray. Foam. Carbon dioxide (CO<sub>2</sub>). Dry powder.

**Unsuitable extinguishing media:** None.

**Precautions:** Spills produce extremely slippery surfaces.

**Special protective equipment for firefighters:** No special protective equipment required. Wear self contained breathing apparatus for fire fighting if necessary.

**Specific methods:** Keep personnel removed and upwind of fire.

**Specific hazards:** In the event of fire the following can be released: Carbon Oxides. Nitrogen Oxides. Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

**Flash point (°C):** Does not flash.

**Autoignition temperature (°C):** Not applicable.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** No special precautions required. Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection). Keep people away from spill/leak.

**Environmental precautions:** As with all chemical products, do not flush into surface water.

**Methods for cleaning up:** Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

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**7. HANDLING AND STORAGE**

**Handling:** Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do not smoke.

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**Storage:** Keep in a dry cool place (0 - 30 °C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

**Technical measures/Precautions:** No special precautions required.

**Incompatible products:** Oxidising agents.

**Technical measures/Storage conditions:** No special storage conditions required.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

**Personal protective equipment:**

**Respiratory protection:** Not required ; except in case of aerosol formation.

**Hand protection:** PVC or other plastic material gloves.

**Eye protection:** Safety glasses with side-shields. Do not wear contact lenses where this product is used.

**Skin and body protection:** Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form:</b>	Viscous liquid
<b>Color:</b>	Milky
<b>Odor:</b>	Aliphatic
<b>pH:</b>	4 - 6 @ 5 g/L
<b>Specific Gravity:</b>	1.0 - 1.1
<b>Melting point/range (°C):</b>	< 5
<b>Flash point (°C):</b>	Does not flash.
<b>Boiling point (°C):</b>	> 100
<b>Autoignition temperature (°C):</b>	Not applicable.
<b>Vapor pressure (mm Hg):</b>	2.3 kPa @ 20°C
<b>Viscosity (mPa.s):</b>	See Technical Bulletin
<b>Water solubility:</b>	Completely miscible
<b>LogPow:</b>	Not applicable.
<b>Kinematic viscosity @ 40°C (mm²/s):</b>	> 20.5

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## 10. STABILITY AND REACTIVITY

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**Conditions to avoid:** Avoid extremes of temperature. Protect from light, moisture and damage.

**Stability:** Stable. Hazardous polymerisation does not occur.

**Materials to avoid:** Oxidizing agents may cause exothermic reactions.

**Hazardous decomposition products:** Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO<sub>x</sub>), carbon oxides (CO<sub>x</sub>). Hydrogen cyanide (hydrocyanic acid).

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## 11. TOXICOLOGICAL INFORMATION

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### Product Information

**Acute toxicity:**

**Oral:** LD50/oral/rat > 5000 mg/kg

**Dermal:** LD50/dermal/rat > 5000 mg/kg

**Inhalation:** The product is not expected to be toxic by inhalation.

**Irritation:**

**Skin:** Slightly irritating.

**Eyes:** May cause slight eye irritation.

**Sensitization:** Not sensitizing.

**Mutagenicity:** Not mutagenic.

**Carcinogenicity:** Not carcinogenic.

**Reproductive effects:** Not toxic for reproduction.

**Chronic toxicity:** No chronic effects.

**Other information:** Due to the viscosity, this product does not present an aspiration hazard.

### Component Information

#### Distillates (petroleum), hydrotreated light

**Acute toxicity:**

**Oral:** LD50/oral/rat > 5000 mg/kg (OECD 401)

**Dermal:** LD50/dermal/rabbit > 5000 mg/kg (OECD 402)

**Inhalation:** LC50/inhalation/4 h/rat = 4951 mg/m<sup>3</sup> (OECD 403)

**Irritation:**

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**Skin:** Not irritating. (OECD 404) Repeated exposure may cause skin dryness or cracking

**Eyes:** Not irritating. (OECD 405)

**Sensitization:** By analogy with similar products, this product is not expected to be sensitizing. (OECD 406)

**Mutagenicity:** Not mutagenic. (OECD 471, 473, 474, 476, 478, 479)

**Carcinogenicity:** Carcinogenicity study in rats (OECD 451): Negative

**Reproductive effects:** By analogy with similar substances, this substance is not expected to be toxic for reproduction.  
NOAEL/rat = 300 ppm (OECD 421)

**Chronic toxicity:** No chronic effects.

**Other information:** May be fatal if swallowed and enters airways.

**Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched**

**Acute toxicity:**

**Oral:** LD50/oral/rat = 200 - 300 mg/kg

**Dermal:** LD50/dermal/rabbit > 2000 mg/kg

**Inhalation:** No data available.

**Irritation:**

**Skin:** Not irritating.

**Eyes:** Causes serious eye irritation

**Sensitization:** The results of testing on guinea pigs showed this material to be non-sensitizing.

**Mutagenicity:** Not mutagenic.

**Carcinogenicity:** Not carcinogenic.

**Reproductive effects:** Two-Generation Reproduction Toxicity (OECD 416)  
NOAEL/rat > 250 mg/kg/day Prenatal Development Toxicity Study (OECD 414)  
NOAEL/Maternal toxicity/rat > 50 mg/kg/day  
NOAEL/Developmental toxicity/rat > 50 mg/kg/day

**Chronic toxicity:** NOAEL/oral/rat/600 days = 50 mg/kg/day

## **12. ECOLOGICAL INFORMATION**

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### **Product Information**

**Aquatic toxicity:**

**Toxicity to fish:** LC50/Fish/96 hours = 10 - 100 mg/L (Estimated)

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**Toxicity to daphnia:** EC50/Daphnia/48 hours = 10 - 100 mg/L (Estimated)

**Toxicity to algae:** Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable.

**Hydrolysis:** At natural pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.

**Bioaccumulation:** The product is not expected to bioaccumulate.

**LogPow:** Not applicable.

**LogKow:** Not determined.

#### Component Information

##### Distillates (petroleum), hydrotreated light

**Acute toxicity to fish:**

**Toxicity to fish:** LC0/Oncorhynchus mykiss/96 hours > 1000 mg/L (OECD 203)

**Toxicity to daphnia:** EC0/Daphnia magna/48 hours > 1000 mg/L (OECD 202)

**Toxicity to algae:** IC0/Pseudokirchneriella subcapitata/72 hours > 1000 mg/L (OECD 201)

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable.

**Hydrolysis:** Does not hydrolyse.

**Bioaccumulation:** The product is not expected to bioaccumulate.

**LogPow:** 3 - 6

**LogKow:** Not determined.

##### Poly(oxy-1,2-ethanediyl), a-tridecyl-w-hydroxy-, branched

**Toxicity to fish:** LC50/Cyprinus carpio/96 hours = 1 - 10 mg/L (OECD 203)

**Toxicity to daphnia:** EC50/Daphnia/48 hours = 1 - 10 mg/L (OECD 202)

**Toxicity to algae:** IC50/Desmodesmus subspicatus/72 hours = 1 - 10 mg/L (OECD 201)

**Environmental fate:**

**Persistence and degradability:** Readily biodegradable. > 60% / 28 days (OECD 301 B)

**Hydrolysis:** Does not hydrolyse.

**Bioaccumulation:** No data available

**LogPow:** > 3

**LogKow:** Koc > 5000

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### 13. DISPOSAL CONSIDERATIONS

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**Disposal:** Dispose of in accordance with local, state and federal regulations.

**Container:** Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, state and federal regulations.

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### 14. TRANSPORT INFORMATION

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**DOT:**

Not classified as dangerous in the meaning of DOT regulations.

**IMDG/IMO:**

Not classified as dangerous in the meaning of IMO/IMDG regulations.

**ICAO/IATA:**

Not classified as dangerous in the meaning of ICAO/IATA regulations.

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### 15. REGULATORY INFORMATION

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**Product Information**

**US SARA Reporting Requirements:** None.

**RCRA status :** Not RCRA hazardous.

**SARA (Section 311/312) hazard class:** Not concerned.

**California Proposition 65 Information:** WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

**International Inventories:**

**USA (TSCA):** All components of this product are either listed on the inventory or are exempt from listing.

**Canada (DSL):** All components of this product are either listed on the inventory or are exempt from listing.

**China (IECSC):** All components of this product are either listed on the inventory or are exempt from listing.

**European Union (REACH):** All components of this product have been registered or pre-registered with the European Chemicals Agency or are exempt from registration.

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**Australia (AICS):** All components of this product are either listed on the inventory or are exempt from listing.

**Japan (ENCS):** All components of this product are either listed on the inventory or are exempt from listing.

**Korea (ECL):** All components of this product are either listed on the inventory or are exempt from listing.

**Philippines (PICCS):** All components of this product are either listed on the inventory or are exempt from listing.

**Taiwan (CSNN):** All components of this product are either listed on the inventory or are exempt from listing.

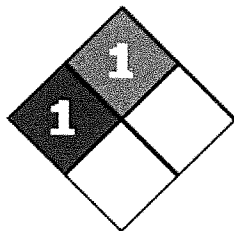
**New Zealand (NZIoC):** All components of this product are either listed on the inventory or are exempt from listing.

## 16. OTHER INFORMATION

### NFPA and HMIS Ratings :

#### NFPA:

Health:	1
Flammability:	1
Instability:	0



#### HMIS:

Health:	1
Flammability:	1
Physical Hazard:	0
PPE Code:	B

### This MSDS was prepared in accordance with the following:

ISO 11014-1: Material Safety Data Sheet for Chemical Products

ANSI Z400.1-2004; Material Safety Data Sheets - Preparation

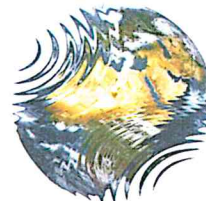
**Revision Number:** 14.01a

ENCC004

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55082

Form <b>W-9</b> (Rev. November 2005) Department of the Treasury Internal Revenue Service	<b>Request for Taxpayer          Identification Number and Certification</b>	Give form to the requester. Do not send to the IRS.				
Print or type See Specific Instructions on page 2	Name (as shown on your income tax return) <b>POLYDYNE INC.</b>					
	Business name, if different from above					
	Check appropriate box: <input type="checkbox"/> Individual/Sole proprietor <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other					
	Address (number, street, and apt. or suite no.) <b>CORPORATE OFFICE: 1 CHEMICAL PLANT ROAD</b>					
	City, state, and ZIP code <b>RICEBORO GA 31323</b>					
Requester's name and address (optional)		Exempt from backup withholding				
List account number(s) here (optional)						
<b>Part I Taxpayer Identification Number (TIN)</b>						
Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3. Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Social security number</td> </tr> <tr> <td style="text-align: center;"> <div style="display: flex; justify-content: space-around;"> <div>3</div><div>4</div><div>1</div><div>8</div><div>1</div><div>0</div><div>2</div><div>8</div><div>3</div> </div> </td> </tr> <tr> <td style="text-align: center;">or</td> </tr> <tr> <td style="text-align: center;">Employer identification number</td> </tr> </table>			Social security number	<div style="display: flex; justify-content: space-around;"> <div>3</div><div>4</div><div>1</div><div>8</div><div>1</div><div>0</div><div>2</div><div>8</div><div>3</div> </div>	or	Employer identification number
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or						
Employer identification number						
<b>Part II Certification</b>						
Under penalties of perjury, I certify that:						
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and 3. I am a U.S. person (including a U.S. resident alien).						
<b>Certification instructions.</b> You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)						
Sign Here	Signature of U.S. person <i>Kathy Keck</i>	Date <i>3/12/2007</i>				
<b>Purpose of Form</b> A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA. <b>U.S. person.</b> Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to: 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued), 2. Certify that you are not subject to backup withholding, or 3. Claim exemption from backup withholding if you are a U.S. exempt payee. In 3 above, if applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income. <b>Note.</b> If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9. For federal tax purposes, you are considered a person if you are:						
<ul style="list-style-type: none"> <li>• An individual who is a citizen or resident of the United States,</li> <li>• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or</li> <li>• Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.</li> </ul> <b>Special rules for partnerships.</b> Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income. The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:						
<ul style="list-style-type: none"> <li>• The U.S. owner of a disregarded entity and not the entity,</li> </ul>						



## TABULATIONS FOR BID

**To: Jefferson Parish**

**State: LA**

**From: Polydyne Inc.**

**Fax No. (912)880-2078**

**Opened: 2-19-2015**

**Mail: PolyBidDpt@snfhc.com**

**Subject: Bid #50-00112406-Polymer**

Please provide us with tabulations on the subject bid by filling out this form or attaching your tabulations form to it. A self-addressed stamped envelope is included for your use. If possible, please fax us these tabulations to the above referenced number.

**Awarded: YES/NO**

(circle one)

If YES, indicate awarded vendor with an \*

If NO, indicate expected date of award.

Bidder	Product	Price/Unit	Extension
Polydyne Inc.	CE-293	\$0.785/Lb.	\$196,250.00
Polydyne Inc.	C-6254	\$0.785/Lb.	\$219,800.00

Thank you for your assistance.  
Sincerely,

*Kimberly Fleming*

Kimberly Fleming  
Bids & Contracts Department

Database ID: 115-051