

# CONTRACT SUMMARY

CITY OF FORT LAUDERDALE  
PROCUREMENT SERVICES DEPARTMENT

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<b>Period Covered:</b> 4/5/11 – 4/4/12	<b>Contract No.:</b> 413-10709	<b>Master Blanket:</b> N/A
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**Awarded Vendor:**

Polydyne, Inc.  
One Chemical Plant Road  
Riceboro, GA 31323

Delivery: 7 Days  
Payment Terms: Net 30

Attn: Lawrence Grizzle  
912-880-2035  
Fax 912-880-2078  
Email: [polybiddpt@snfhc.com](mailto:polybiddpt@snfhc.com)

Insurance Coverage Required: Yes  No   
Authorized for Purchases: Under \$25,000  Over   
City Commission Approval: 4/5/11 Pur-02 CAR 11-0421  
Extension Options: Yes  No  Years: 3, 1 year extensions

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**POLYMER, COAGULANT AID**

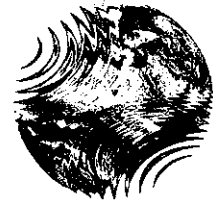
Clarifloc A-3333P, 50 lb bags,

\$ 1.29/ pound

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Department Contract Co-Ordinator: Rick Johnson, Public Works (954) 828-7865

Procurement Specialist: Robert McKenney, CPPB



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## Contact Sheet

TO: City of Fort Lauderdale  
100 N. Andrews Avenue, 619  
Fort Lauderdale, FL 33301

Company Name: Polydyne Inc.  
Contact: Lawrence D. Grizzle  
Phone: (912) 880-2035  
Fax: (912) 880-2078  
Delivery Address: 1 Chemical Plant Road, Riceboro, GA 31323  
Mailing Address: PO Box 279, Riceboro, GA 31323  
Email: polybiddpt@snfhc.com

Federal Tax ID. #: 34-1810283

PAYMENT Remit To Address: PO Box 404642, Atlanta, GA 30384  
Payment Terms: Net 30

Customer Service Contact: Virginia Fundell ext 684  
Phone Number (Toll Free): 1-800-272-3949  
Phone Number: (912) 884-3366

Technical Sales Contact: Larry Fenimore  
Phone Number: (352) 409-3938  
Email: lfenimo@polydyneinc.com

If you have any questions regarding the information provided above, please do not hesitate to contact me at (912) 880-8083. Thank you.

Sincerely,

Heather Radunske  
Administrative Assistant

THIS AGREEMENT, made and entered into this 15<sup>th</sup> day of APRIL, 2011, is by and between the City of Fort Lauderdale, a Florida municipality, ("City"), whose address is 100 North Andrews Avenue, Fort Lauderdale, FL 33301-1016, and Polydyne Inc., a Delaware corporation, authorized to transact business in the state of Florida ("Contractor" or "Company"), whose address and phone are One Chemical Plant Road, Riceboro, GA 31323, Phone 912-880-2035, Fax: 912-880-2078.

WHEREAS, the City issued Invitation to Bid Number 413-10709 ("ITB"), and the Contractor submitted a bid in response to the ITB; and

WHEREAS, on April 5, 2011, the City Commission of the City of Fort Lauderdale approved an agreement with Contractor for the goods or services described in the ITB (Pur-02, CAR No. 11-0421),

NOW, THEREFORE, for and in consideration of the mutual promises and covenants set forth herein and other good and valuable consideration, the City and the Contractor covenant and agree as follows:

1. The Contractor agrees to provide to the City polymer, coagulant aid in accordance with and in strict compliance with the specifications, terms, conditions, and requirements set forth in the ITB and any and all addenda thereto beginning April 5, 2011 and ending April 4, 2012.

2. This contract form G-110 Rev. 01/10, the ITB, any and all addenda to the ITB, and the Contractor's proposal in response to the ITB are integral parts of this Contract, and are incorporated herein.

3. In the event of conflict between or among the contract documents, the order of priority shall be as follows:

First, this contract form, G-110 Rev. 01/10;

Second, any and all addenda to the City's ITB in reverse chronological order;

Third, the ITB;

Fourth, the Contractor's response to any addendum requiring a response;

Fifth, the Contractor's response to the ITB.

4. The Company warrants that the goods and services supplied to the City pursuant to this Contract shall at all times fully conform to the specifications set forth in the ITB and be of the highest quality. In the event the City, in the City's sole discretion, determines that any product or service supplied pursuant to this Contract is defective or does not conform to the specifications set forth in the ITB the City reserves the right unilaterally to cancel an order or cancel this Contract upon written notice to the Contractor, and reduce commensurately any amount of money due the Contractor.

5. The Contractor shall not present any invoice to the City that includes sales tax (85-8012514506C-7) or federal excise tax (59-6000319).

6. Contractor shall direct all invoices in duplicate for payment to Finance Department, City of Fort Lauderdale, 100 N. Andrews Avenue, 6th Floor, Fort Lauderdale, FL 33301. Any applicable discount MUST appear on the invoice.

IN WITNESS WHEREOF, the City and the Contractor execute this Contract as follows:

CITY OF FORT LAUDERDALE

By: Michael J. Walker  
Director of Procurement Services

ATTEST

By: [Signature]

Print Name: Mark Schlag  
Assistant Secretary

CONTRACTOR

By: [Signature]

Print Name: James R. Carlson  
Title: Vice-President  
(If not president of corporation please attach proof of authorization to sign)

STATE OF GEORGIA  
COUNTY OF LIBERTY

The foregoing instrument was acknowledged before me this 13th day of April, 2011, by James R. Carlson as (title): Vice-President for Polydyne, Inc., a Delaware corporation, authorized to transact business in the state of Florida.

(SEAL)

[Signature]  
Notary Public, State of Georgia  
(Signature of Notary Public)  
Maria Mandragan  
(Print, Type, or Stamp Commissioned Name of Notary Public)

Personally Known  OR Produced Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_

# CONTRACT COPY

## Polydyne Inc.

Bid Contact **Randal W Vickery**  
**[polybiddpt@snfhc.com](mailto:polybiddpt@snfhc.com)**  
**Ph 912-880-2035**

Address **One Chemical Plant Rd.**  
**Riceboro, GA 31323**

Supplier Code 00002737

Item #	Line Item Notes	Unit Price	Qty/Unit	Total Price	Attch.	Docs
413-10709-1-01	Coagulant Aid Polymer in dried form.	<b>Supplier Product Code:</b> Clarifloc A-3310	First Offer - \$1.28	22000 / pound	\$28,160.00	Y Y
		<b>Standard Packaging Offered:</b> 50 Lb. Bags <b>Product Offered (See 2.02):</b> Clarifloc A-3310 <b>Manufacturer/Brand:</b> Polydyne Inc. <b>Minimum Order, if any:</b> N/A				
		<b>Supplier Product Code:</b> Clarifloc A-3333P	Alt 2 - \$1.29	22000 / pound	\$28,380.00	Y Y
		<b>Standard Packaging Offered:</b> 50 Lb. Bags <b>Product Offered (See 2.02):</b> Clarifloc A-3333P <b>Manufacturer/Brand:</b> Polydyne Inc. <b>Minimum Order, if any:</b> N/A				
		Clarifloc A-3333P is the third product listed in Section 2.02 as an approved product.				

Supplier Total **\$28,380.00**

**Polydyne Inc.**

Item: **Coagulant Aid Polymer in dried form.**

**Attachments**

Insurance Certificate for Fort Lauderdale.pdf

NSF Listing of Polydyne Products.pdf

Product Data Sheet and MSDS for Clarifloc A-3310.pdf



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)

2/22/2011

<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>THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.</b>
	<b>INSURED</b> Polydyne Inc. One Chemical Plant Road PO Box 250 Riceboro GA 31323	
		<b>INSURER A:</b> Chartis Specialty Insurance Company <b>INSURER B:</b> National Union Fire Insurance Company of Pittsburgh PA <b>INSURER C:</b> Hartford Fire Insurance Company of Midwest <b>INSURER D:</b> <b>INSURER E:</b> <b>INSURER F:</b> <b>INSURER G:</b> <b>INSURER H:</b>
		<b>NAIC #</b> 19445 37478

**COVERAGES**

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. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	X	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> LOC	EG14362834	12/31/2010	12/31/2011	EACH OCCURRENCE \$ 1,000,000 DAMAGES 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	X	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS  <b>GARAGE LIABILITY</b> <input type="checkbox"/> ANY AUTO	CA3374332	12/31/2010	12/31/2011	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EACH ACC \$ AGG \$	
B		<b>EXCESS/UMBRELLA LIABILITY</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION	15972730	12/31/2010	12/31/2011	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000	
C		<b>WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below <input type="checkbox"/> Y/N	10WNR30600	12/31/2010	12/31/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000	
		OTHER					

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS**  
 The City of Fort Lauderdale is included as Additional Insured under General Liability, Automobile Liability coverage as respects to liability arising out of the operations of the named insured, as their interest may appear, according to the terms as required by contract and subject to the policy terms, conditions and exclusions.  
 RE: Bid #413-10709 - Polymer, Coagulant Aid (Annual Contract)

<b>CERTIFICATE HOLDER</b> City of Fort Lauderdale Procurement Services Department 100 N. Andrews Avenue, Room 619 Ft. Lauderdale, FL 33301	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE  1
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ACORD 25 (2009/01)

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**NSF Product and Service Listings**

These NSF Official Listings are current as of **Monday, February 21, 2011** at 12:15 a.m. Eastern Time. Please contact NSF International to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://www.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=polydyne&TradeName=Clarifloc&>

**NSF/ANSI STANDARD 60  
 Drinking Water Treatment Chemicals - Health Effects**

**Polydyne Incorporated**

P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

**Facility : # 88 USA**

**Polyaluminum Chloride[AL]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1100	Coagulation & Flocculation	250mg/L
Clarifloc® C-1200	Coagulation & Flocculation	250mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

**Polymer Blends**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1000[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1050[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1051[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1052[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1200[CP]	Algicide Coagulation & Flocculation	200mg/L

Clarifloc® C-1250	Coagulation & Flocculation	200mg/L
Clarifloc® C-1251[CP]	Algicide	200mg/L
Clarifloc® C-1252[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1253[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1400[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1450[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1451[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1452[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1453[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1454[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1500[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1550[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1551[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1600[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1650[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1651[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1700	Coagulation & Flocculation	200mg/L
Clarifloc® C-1750	Coagulation & Flocculation	200mg/L
Clarifloc® C-1751	Coagulation & Flocculation	200mg/L
Clarifloc® C-1752	Coagulation & Flocculation	200mg/L
Clarifloc® C-1753	Coagulation & Flocculation	200mg/L
Clarifloc® C-1754	Coagulation & Flocculation	200mg/L
Clarifloc® C-5100[CP]	Algicide	200mg/L
Clarifloc® PRXA01[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA02[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA03[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA04[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA05[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA06[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® PRXA07[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® PRXA08[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
	Coagulation & Flocculation	

Clarifloc® PRXA09[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXA10[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXA11[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA12[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA13[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA14[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA15[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA16[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA17[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA18[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA19[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA20[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXB01[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB02[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB03[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB04[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB05[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB06[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB07[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB08[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB09[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB10[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB11[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB12[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB13[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB14[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB15[CP]	Algicide Coagulation & Flocculation	60mg/L

Clarifloc® PRXB16[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB17[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB18[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB19[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB20[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB21[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB22[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB23[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB24[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB25[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB26[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB27[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB28[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB29[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB30[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB31[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB32[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB33[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB34[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB35[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC01[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC02[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC03[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC04[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC05[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC06[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC07[CP]	Algicide Coagulation & Flocculation	100mg/L

Clarifloc® PRXC08[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC09[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC10[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC11[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC12[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC13[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC14[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC15[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC16[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC17[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC18[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC19[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC20[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXD01	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD02	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD03	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD04	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD05	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD06	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD07	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD08	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD09	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD10	Coagulation & Flocculation	200mg/L

[CP] The finished drinking water shall be monitored to ensure that levels of copper do not exceed 1.3 mg/L.

**Polydyne Incorporated**  
 P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

**Facility : # 88 USA**

**Polymer Blends[AL] [PD] [PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® 12781	Coagulation & Flocculation	40mg/L
Clarifloc® 12976	Coagulation & Flocculation	40mg/L
Clarifloc® 12980	Coagulation & Flocculation	40mg/L
Clarifloc® 13276	Coagulation & Flocculation	250mg/L
Clarifloc® 13280	Coagulation & Flocculation	40mg/L
Clarifloc® 13281	Coagulation & Flocculation	31mg/L
Clarifloc® 14476	Coagulation & Flocculation	142mg/L
Clarifloc® 14480	Coagulation & Flocculation	50mg/L
Clarifloc® 14481	Coagulation & Flocculation	50mg/L
Clarifloc® 14681	Coagulation & Flocculation	125mg/L
Clarifloc® C-1005	Coagulation & Flocculation	155mg/L
Clarifloc® C-1010	Coagulation & Flocculation	163mg/L
Clarifloc® C-1015	Coagulation & Flocculation	118mg/L
Clarifloc® C-1020	Coagulation & Flocculation	91mg/L
Clarifloc® C-1025	Coagulation & Flocculation	74mg/L
Clarifloc® C-1150H	Coagulation & Flocculation	40mg/L
Clarifloc® C-1309H	Coagulation & Flocculation	250mg/L
Clarifloc® C-2005	Coagulation & Flocculation	155mg/L
Clarifloc® C-2010	Coagulation & Flocculation	163mg/L
Clarifloc® C-2015	Coagulation & Flocculation	147mg/L
Clarifloc® C-2020	Coagulation & Flocculation	114mg/L
Clarifloc® C-2110	Coagulation & Flocculation	50mg/L
Clarifloc® C-2220H	Coagulation & Flocculation	125mg/L
Clarifloc® C-2238	Coagulation & Flocculation	50mg/L
Clarifloc® C-2317	Coagulation & Flocculation	142mg/L
Clarifloc® C-5025	Coagulation & Flocculation	163mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.  
 [PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.  
 [PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

NOTE: All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

**Polydyne Incorporated**  
 P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659  
 Visit this company's website

**Facility : Los Angeles, CA**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
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**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

Clarifloc® C-308P	Coagulation & Flocculation	50 mg/L
Clarifloc® C-318	Coagulation & Flocculation	25 mg/L
Clarifloc® C-318R	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50 mg/L
Clarifloc® C-348	Coagulation & Flocculation	25 mg/L
Clarifloc® C-358	Coagulation & Flocculation	50 mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100 mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyacrylamide[PC]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® A-6320	Coagulation & Flocculation	3mg/L
Clarifloc® N-120P	Coagulation & Flocculation	3mg/L
Clarifloc® N-6310	Coagulation & Flocculation	3 mg/L

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polymer Blends[AL] [PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-2005	Coagulation & Flocculation	155 mg/L
Clarifloc® C-2010	Coagulation & Flocculation	163 mg/L
Clarifloc® C-2015	Coagulation & Flocculation	147 mg/L
Clarifloc® C-2020	Coagulation & Flocculation	114 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

Facility : Riceboro, GA

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50mg/L
Clarifloc® C-348	Coagulation & Flocculation	25mg/L
Clarifloc® C-358	Coagulation & Flocculation	50mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-398	Coagulation & Flocculation	29mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyacrylamide[PC]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® A-210P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3301	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3308	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3310	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3320	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3333P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3340	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3360	Coagulation & Flocculation	1mg/L
Clarifloc® A-6320	Coagulation & Flocculation	3 mg/L
Clarifloc® A-6330	Coagulation & Flocculation	1 mg/L
Clarifloc® A-6340	Coagulation & Flocculation	1 mg/L

Clarifloc® A-6360	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3203	Coagulation & Flocculation	1mg/L
Clarifloc® C-3205	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3210	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3223	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3226	Coagulation & Flocculation	1mg/L
Clarifloc® C-3230	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3257	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3280	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6203	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6210	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6215	Coagulation & Flocculation	3mg/L
Clarifloc® C-6220	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6240	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6260	Coagulation & Flocculation	3 mg/L
Clarifloc® N-120P	Coagulation & Flocculation	3 mg/L
Clarifloc® N-3300P	Coagulation & Flocculation	1 mg/L
Clarifloc® N-6310	Coagulation & Flocculation	3 mg/L

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polyamines[PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	13mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Facility : Dolton, IL**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L

Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Facility : Pearlington, MS**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50mg/L
Clarifloc® C-348	Coagulation & Flocculation	25mg/L
Clarifloc® C-358	Coagulation & Flocculation	50mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-398	Coagulation & Flocculation	29mg/L
Clarifloc® C-4135	Coagulation & Flocculation	29mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	71mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L

Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyamines[PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309D	Coagulation & Flocculation	32mg/L
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	8mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polydyne, Incorporated**

P.O. Box 279  
Riceboro, GA 31323  
United States  
800-848-7659

**Facility : # 15 USA**

**Polymer Blends[AL] [PD] [PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-2005	Coagulation & Flocculation	154mg/L
Clarifloc® C-2015	Coagulation & Flocculation	162mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Facility : # 25 USA**

**Polyaluminum Chloride[AL]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1252	Coagulation & Flocculation	250mg/L
Clarifloc® C-1253	Coagulation & Flocculation	250mg/L

Clarifloc® C-1254	Coagulation & Flocculation	250mg/L
Clarifloc® C-1310	Coagulation & Flocculation	250mg/L
Clarifloc® C-1400	Coagulation & Flocculation	250mg/L
Clarifloc® C-1452	Coagulation & Flocculation	250mg/L
Clarifloc® C-1550	Coagulation & Flocculation	250mg/L
Clarifloc® C-1552	Coagulation & Flocculation	250mg/L
Clarifloc® C-1650	Coagulation & Flocculation	250mg/L
Clarifloc® C-1651	Coagulation & Flocculation	250mg/L
Clarifloc® C-1700	Coagulation & Flocculation	250mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

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**SNF POLYDYNE**

# CLARIFLOC® A-3310 POLYMER

## PRINCIPAL USES

CLARIFLOC A-3310 is a low charge anionic polyacrylamide that is used as a flocculant or coagulant aid in a wide variety of mining, municipal, and industrial water and wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, dewatering, and filtration. CLARIFLOC A-3310 can be used alone or in conjunction with other organic and inorganic coagulants.

## TYPICAL PROPERTIES

Physical Form	White Granular Powder
Ionic Nature	Anionic
Anionicity	10 %
pH (0.25% Sol'n)	7-9

## PREPARATION AND FEEDING

CLARIFLOC A-3310 is water soluble, but certain precautions should be followed to obtain total dissolution with minimum loss of activity. Complete wetting of the individual polymer particles is the single most important factor in the preparation of powdered polymer solutions. One method to achieve good wetting is to use an aspirator type disperser that draws the solid polymer particles into the water stream using a vacuum created by water pressure. A water pressure of 30 psig or greater is required to implement this method. The wetted polymer from the aspirator should be discharged into a vessel equipped with a high speed mixer capable of stirring the entire tank. The polymer solution should be stirred for 15-60 minutes or until dissolution is complete. The suggested make-down concentration for CLARIFLOC A-3310 is 0.1 - 0.5 % by weight. Completely automated equipment is commercially available.

## MATERIALS OF CONSTRUCTION

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials for dissolution tanks. Unlined mild steel, black iron, galvanized steel, copper or brass should not be used in any part of the feed system. Stainless steel or PVC are recommended for pump heads and feed lines.

## MANUFACTURING SPECIFICATIONS

% Moisture	< 12
UL Viscosity	5.1 - 5.7 cPs
% Insolubles	< 3.5

## HANDLING AND STORAGE

Suggested in-plant storage of CLARIFLOC A-3310 is one year in unopened bags. Store in a cool, dry area. For spills of dry CLARIFLOC A-3310, sweep up the material and reuse, if possible. Do not spray water on spilled dry product because the resulting gel is very slippery and difficult to clean up. For spills of CLARIFLOC A-3310 solutions, sprinkle sawdust or vermiculite over the spill area and sweep into approved chemical disposal containers. Rock salt cuts slipperiness.

## SAFETY INFORMATION

CLARIFLOC A-3310 can potentially irritate the skin, eyes and lungs, so gloves, goggles and filter type respirator should be worn while handling this product. CLARIFLOC A-3310 is not readily ignited, but it will support an existing fire. Foam, CO<sub>2</sub> or dry chemical methods should be used because polymer-water mixtures are very slippery. Anyone responsible for the procurement, use or disposal of CLARIFLOC A-3310 should familiarize themselves with the appropriate safety and handling precautions outlined in the POLYDYNE Material Safety Data Sheet. In the event of an emergency with CLARIFLOC A-3310, contact Chemtrec anytime day or night at (800) 424-9300.

## SHIPPING

CLARIFLOC A-3310 is shipped in 50 pound poly-lined bags with 30 bags to a pallet.

## ADDITIONAL INFORMATION

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

**(800) 848-7659**

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# Material Safety Data Sheet

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

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**Product name :** CLARIFLOC (R) A-3310 POLYMER

**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 :** Granular solid  
**Color :** White  
**Odor :** None

### Emergency Overview :

Aqueous solutions or powders that become wet render surfaces extremely slippery.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Identification :** Anionic water-soluble polymer.

### Regulated Components:

None.

**Material Safety Data Sheet  
CLARIFLOC (R) A-3310 POLYMER**

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**4. FIRST AID MEASURES**

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**Inhalation** : No hazards which require special first aid measures.

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

**Eye contact** : Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

**Ingestion** : No hazards which require special first aid measures. The product is not considered toxic based on studies on laboratory animals.

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**5. FIRE-FIGHTING MEASURES**

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**Unsuitable extinguishing media** : None.

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

**Precautions** : Aqueous solutions or powders that become wet render surfaces extremely slippery.

**Special protective equipment for firefighters** : No special protective equipment required.

**Flash point** : Not applicable.

**Autoignition temperature** : Not applicable

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**6. ACCIDENTAL RELEASE MEASURES**

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**Personal precautions** : No special precautions required.

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

**Methods for cleaning up** : Do not flush with water. Clean up promptly by sweeping 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**

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**Handling**

**Safe handling advice** : Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hands before breaks and at the end of workday.

**Storage**

Keep in a cool, dry place (0 - 35 °C).

**Material Safety Data Sheet  
CLARIFLOC (R) A-3310 POLYMER**

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**Occupational Exposure Limits**

No exposure limits noted for ingredient(s).

**Engineering measures**

Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

**Personal protective equipment**

**Respiratory protection** : Dust safety masks are recommended where concentration of total dust is more than 10 mg/m<sup>3</sup>.

**Hand protection** : Rubber 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.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**Form** : Granular solid

**Color** : White

**Odor** : None

**pH** : 4-9 @ 5 g/l

**Melting point/range** : Not applicable

**Flash point** : Not applicable

**Autoignition temperature** : Not applicable

**Approx. bulk density** : 0.80

**Water solubility** : Completely miscible

**LogPow** : ~0

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**10. STABILITY AND REACTIVITY**

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

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

**Material Safety Data Sheet  
CLARIFLOC (R) A-3310 POLYMER**

**Hazardous decomposition products :** Thermal decomposition may produce. Nitrogen oxides (NOx). Carbon oxides (COx).

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

**Skin :** The results of testing on rabbits showed this material to be non-toxic even at high dose levels.

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

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

**Irritation**

**Skin :** The results of testing on rabbits showed this material to be non-irritating to the skin.

**Eyes :** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae.

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

**Chronic toxicity :** A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects.

**12. ECOLOGICAL INFORMATION****Aquatic toxicity**

**Toxicity to fish :** LC50/96 hours > 100 mg/l, (OECD 203).

**Toxicity to daphnia :** LC50/Daphnia m./48 hours > 100 mg/l, (OECD 202).

**Toxicity to algae :** IC50/Scenedesmus subspicatus/72 hours > 100 mg/l. (OECD 201).

**Environmental fate**

**Persistence and degradability :** Not readily biodegradable.

**Hydrolysis :** Does not hydrolyse.

**LogPow :** ~0

**Bioaccumulation :** Does not bioaccumulate.

**Material Safety Data Sheet  
CLARIFLOC (R) A-3310 POLYMER**

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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**

**Remarks :** Not classified as dangerous in the meaning of DOT regulations.

**IMDG/IMO**

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

**ICAO/IATA**

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

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**15. REGULATORY INFORMATION**

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**US SARA Reporting Requirements:****SARA Title III Sections****State Regulations****California Proposition 65 Information :**

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product contains the following substance (s) known to the State of California to cause cancer : Acrylamide.

**International Inventories** International Inventories.

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

**Australia (AICS) :** 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 (EINECS/ELINCS) :** 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.

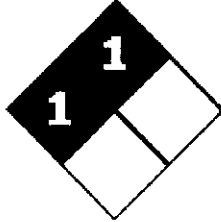
**Philippines (PICCS) :** All components of this product are either listed on the inventory or are exempt from listing.

**Material Safety Data Sheet  
CLARIFLOC (R) A-3310 POLYMER**

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**16. OTHER INFORMATION**

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

Health : 1  
Flammability : 1  
Instability : 0

Health : 1  
Flammability : 1  
Physical Hazard : 0

**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

**Contact :** Regulatory Affairs Manager

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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

**Polydyne Inc.**

Item: **Coagulant Aid Polymer in dried form.**

**Attachments**

Insurance Certificate for Fort Lauderdale.pdf

NSF Listing of Polydyne Products.pdf

Product Data Sheet and MSDS for Clarifloc A-3333P.pdf



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY)

2/22/2011

<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>THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.</b>
<b>INSURED</b> Polydyne Inc. One Chemical Plant Road PO Box 250 Riceboro GA 31323		<b>INSURERS AFFORDING COVERAGE</b>	
		INSURER A: Charlis Specialty Insurance Company	NAIC #
		INSURER A: National Union Fire Insurance Company of Pittsburgh PA	19445
		INSURER C: Hartford Fire Insurance Company of Midwest	37478
		INSURER D:	
		INSURER E:	
		INSURER F:	
		INSURER G:	
		INSURER H:	

**COVERAGES**

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. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	X	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> LOC	EG14362834	12/31/2010	12/31/2011	EACH OCCURRENCE	\$ 1,000,000
						DAMAGES 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	X	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS GARAGE LIABILITY <input type="checkbox"/> ANY AUTO	CA3374332	12/31/2010	12/31/2011	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
						AUTO ONLY - EA ACCIDENT	\$
						OTHER THAN AUTO ONLY:	EACH ACC \$
							AGG \$
B		EXCESS/UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION	15972730	12/31/2010	12/31/2011	EACH OCCURRENCE	\$ 1,000,000
						AGGREGATE	\$ 1,000,000
C		WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N If yes, describe under SPECIAL PROVISIONS below	10WNR30600	12/31/2010	12/31/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER	
						E.L. EACH ACCIDENT	\$ 1,000,000
						E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
		OTHER					

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS**

The City of Fort Lauderdale is included as Additional Insured under General Liability, Automobile Liability coverage as respects to liability arising out of the operations of the named insured, as their interest may appear, according to the terms as required by contract and subject to the policy terms, conditions and exclusions.  
 RE: Bid #413-10709 - Polymer, Coagulant Aid (Annual Contract)

**CERTIFICATE HOLDER**

City of Fort Lauderdale  
 Procurement Services Department  
 100 N. Andrews Avenue, Room 619  
 Ft. Lauderdale, FL 33301

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2009/01)

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**NSF Product and Service Listings**

These NSF Official Listings are current as of **Monday, February 21, 2011** at 12:15 a.m. Eastern Time. Please contact NSF International to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://www.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=polydyne&TradeName=Clarifloc&>

**NSF/ANSI STANDARD 60  
 Drinking Water Treatment Chemicals - Health Effects**

**Polydyne Incorporated**

P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

**Facility : # 88 USA**

**Polyaluminum Chloride[AL]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1100	Coagulation & Flocculation	250mg/L
Clarifloc® C-1200	Coagulation & Flocculation	250mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

**Polymer Blends**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1000[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1050[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1051[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1052[CP]	Algicide Coagulation & Flocculation	307mg/L
Clarifloc® C-1200[CP]	Algicide Coagulation & Flocculation	200mg/L

Clarifloc® C-1250	Coagulation & Flocculation	200mg/L
Clarifloc® C-1251[CP]	Algicide	200mg/L
Clarifloc® C-1252[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1253[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1400[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1450[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1451[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1452[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1453[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1454[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1500[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1550[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1551[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® C-1600[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1650[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1651[CP]	Coagulation & Flocculation	
	Algicide	100mg/L
Clarifloc® C-1700	Coagulation & Flocculation	200mg/L
Clarifloc® C-1750	Coagulation & Flocculation	200mg/L
Clarifloc® C-1751	Coagulation & Flocculation	200mg/L
Clarifloc® C-1752	Coagulation & Flocculation	200mg/L
Clarifloc® C-1753	Coagulation & Flocculation	200mg/L
Clarifloc® C-1754	Coagulation & Flocculation	200mg/L
Clarifloc® C-5100[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® PRXA01[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA02[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA03[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA04[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA05[CP]	Coagulation & Flocculation	
	Algicide	307mg/L
Clarifloc® PRXA06[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® PRXA07[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
Clarifloc® PRXA08[CP]	Coagulation & Flocculation	
	Algicide	200mg/L
	Coagulation & Flocculation	

Clarifloc® PRXA09[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXA10[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXA11[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA12[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA13[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA14[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA15[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXA16[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA17[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA18[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA19[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXA20[CP]	Algicide Coagulation & Flocculation	50mg/L
Clarifloc® PRXB01[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB02[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB03[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB04[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB05[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB06[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB07[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB08[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB09[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB10[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB11[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB12[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB13[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB14[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXB15[CP]	Algicide Coagulation & Flocculation	60mg/L

Clarifloc® PRXB16[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB17[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB18[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB19[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB20[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB21[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB22[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB23[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB24[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXB25[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB26[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB27[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB28[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB29[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXB30[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB31[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB32[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB33[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB34[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXB35[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC01[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC02[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC03[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC04[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC05[CP]	Algicide Coagulation & Flocculation	200mg/L
Clarifloc® PRXC06[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC07[CP]	Algicide Coagulation & Flocculation	100mg/L

Clarifloc® PRXC08[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC09[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC10[CP]	Algicide Coagulation & Flocculation	100mg/L
Clarifloc® PRXC11[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC12[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC13[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC14[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC15[CP]	Algicide Coagulation & Flocculation	60mg/L
Clarifloc® PRXC16[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC17[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC18[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC19[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXC20[CP]	Algicide Coagulation & Flocculation	40mg/L
Clarifloc® PRXD01	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD02	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD03	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD04	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD05	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD06	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD07	Coagulation & Flocculation	100mg/L
Clarifloc® PRXD08	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD09	Coagulation & Flocculation	200mg/L
Clarifloc® PRXD10	Coagulation & Flocculation	200mg/L

[CP] The finished drinking water shall be monitored to ensure that levels of copper do not exceed 1.3 mg/L.

**Polydyne Incorporated**  
 P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

**Facility : # 88 USA**

**Polymer Blends[AL] [PD] [PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® 12781	Coagulation & Flocculation	40mg/L
Clarifloc® 12976	Coagulation & Flocculation	40mg/L
Clarifloc® 12980	Coagulation & Flocculation	40mg/L
Clarifloc® 13276	Coagulation & Flocculation	250mg/L
Clarifloc® 13280	Coagulation & Flocculation	40mg/L
Clarifloc® 13281	Coagulation & Flocculation	31mg/L
Clarifloc® 14476	Coagulation & Flocculation	142mg/L
Clarifloc® 14480	Coagulation & Flocculation	50mg/L
Clarifloc® 14481	Coagulation & Flocculation	50mg/L
Clarifloc® 14681	Coagulation & Flocculation	125mg/L
Clarifloc® C-1005	Coagulation & Flocculation	155mg/L
Clarifloc® C-1010	Coagulation & Flocculation	163mg/L
Clarifloc® C-1015	Coagulation & Flocculation	118mg/L
Clarifloc® C-1020	Coagulation & Flocculation	91mg/L
Clarifloc® C-1025	Coagulation & Flocculation	74mg/L
Clarifloc® C-1150H	Coagulation & Flocculation	40mg/L
Clarifloc® C-1309H	Coagulation & Flocculation	250mg/L
Clarifloc® C-2005	Coagulation & Flocculation	155mg/L
Clarifloc® C-2010	Coagulation & Flocculation	163mg/L
Clarifloc® C-2015	Coagulation & Flocculation	147mg/L
Clarifloc® C-2020	Coagulation & Flocculation	114mg/L
Clarifloc® C-2110	Coagulation & Flocculation	50mg/L
Clarifloc® C-2220H	Coagulation & Flocculation	125mg/L
Clarifloc® C-2238	Coagulation & Flocculation	50mg/L
Clarifloc® C-2317	Coagulation & Flocculation	142mg/L
Clarifloc® C-5025	Coagulation & Flocculation	163mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

NOTE: All Listed products from this facility are NSF Certified, whether or not they bear the NSF Mark.

**Polydyne Incorporated**

P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

[Visit this company's website](#)

**Facility : Los Angeles, CA**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
--------------------------	-------------------------	----------------

Clarifloc® C-308P	Coagulation & Flocculation	50 mg/L
Clarifloc® C-318	Coagulation & Flocculation	25 mg/L
Clarifloc® C-318R	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50 mg/L
Clarifloc® C-348	Coagulation & Flocculation	25 mg/L
Clarifloc® C-358	Coagulation & Flocculation	50 mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100 mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyacrylamide[PC]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® A-6320	Coagulation & Flocculation	3mg/L
Clarifloc® N-120P	Coagulation & Flocculation	3mg/L
Clarifloc® N-6310	Coagulation & Flocculation	3 mg/L

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polymer Blends[AL] [PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-2005	Coagulation & Flocculation	155 mg/L
Clarifloc® C-2010	Coagulation & Flocculation	163 mg/L
Clarifloc® C-2015	Coagulation & Flocculation	147 mg/L
Clarifloc® C-2020	Coagulation & Flocculation	114 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Facility : Riceboro, GA**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50mg/L
Clarifloc® C-348	Coagulation & Flocculation	25mg/L
Clarifloc® C-358	Coagulation & Flocculation	50mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-398	Coagulation & Flocculation	29mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyacrylamide[PC]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® A-210P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3301	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3308	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3310	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3320	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3333P	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3340	Coagulation & Flocculation	1 mg/L
Clarifloc® A-3360	Coagulation & Flocculation	1mg/L
Clarifloc® A-6320	Coagulation & Flocculation	3 mg/L
Clarifloc® A-6330	Coagulation & Flocculation	1 mg/L
Clarifloc® A-6340	Coagulation & Flocculation	1 mg/L

Clarifloc® A-6360	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3203	Coagulation & Flocculation	1mg/L
Clarifloc® C-3205	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3210	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3223	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3226	Coagulation & Flocculation	1mg/L
Clarifloc® C-3230	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3257	Coagulation & Flocculation	1 mg/L
Clarifloc® C-3280	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6203	Coagulation & Flocculation	1 mg/L
Clarifloc® C-6210	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6215	Coagulation & Flocculation	3mg/L
Clarifloc® C-6220	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6240	Coagulation & Flocculation	3 mg/L
Clarifloc® C-6260	Coagulation & Flocculation	3 mg/L
Clarifloc® N-120P	Coagulation & Flocculation	3 mg/L
Clarifloc® N-3300P	Coagulation & Flocculation	1 mg/L
Clarifloc® N-6310	Coagulation & Flocculation	3 mg/L

[PC] Polyacrylamide Products Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polyamines[PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	13mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Facility : Dolton, IL**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L

Clarifloc® C-4414	Coagulation & Flocculation	72mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L
Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Facility : Pearlington, MS**

**Poly (Diallyldimethylammonium Chloride)(pDADMAC)[PD]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-308P	Coagulation & Flocculation	50mg/L
Clarifloc® C-318	Coagulation & Flocculation	25mg/L
Clarifloc® C-328	Coagulation & Flocculation	83mg/L
Clarifloc® C-338	Coagulation & Flocculation	50mg/L
Clarifloc® C-348	Coagulation & Flocculation	25mg/L
Clarifloc® C-358	Coagulation & Flocculation	50mg/L
Clarifloc® C-368	Coagulation & Flocculation	29mg/L
Clarifloc® C-378	Coagulation & Flocculation	50mg/L
Clarifloc® C-388	Coagulation & Flocculation	100mg/L
Clarifloc® C-398	Coagulation & Flocculation	29mg/L
Clarifloc® C-4135	Coagulation & Flocculation	29mg/L
Clarifloc® C-4408	Coagulation & Flocculation	125mg/L
Clarifloc® C-4410	Coagulation & Flocculation	100mg/L
Clarifloc® C-4411	Coagulation & Flocculation	91mg/L
Clarifloc® C-4412	Coagulation & Flocculation	83mg/L
Clarifloc® C-4413	Coagulation & Flocculation	77mg/L
Clarifloc® C-4414	Coagulation & Flocculation	71mg/L
Clarifloc® C-4415	Coagulation & Flocculation	67mg/L
Clarifloc® C-4416	Coagulation & Flocculation	62mg/L
Clarifloc® C-4417	Coagulation & Flocculation	59mg/L
Clarifloc® C-4418	Coagulation & Flocculation	56mg/L
Clarifloc® C-4419	Coagulation & Flocculation	53mg/L
Clarifloc® C-4420	Coagulation & Flocculation	50mg/L
Clarifloc® C-4422	Coagulation & Flocculation	46mg/L
Clarifloc® C-4424	Coagulation & Flocculation	42mg/L
Clarifloc® C-4426	Coagulation & Flocculation	39mg/L
Clarifloc® C-4428	Coagulation & Flocculation	36mg/L
Clarifloc® C-4430	Coagulation & Flocculation	33mg/L
Clarifloc® C-4435	Coagulation & Flocculation	29mg/L

Clarifloc® C-4440	Coagulation & Flocculation	25mg/L
Clarifloc® LF-3541	Coagulation & Flocculation	100mg/L

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

**Polyamines[PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-309D	Coagulation & Flocculation	32mg/L
Clarifloc® C-309P	Coagulation & Flocculation	20mg/L
Clarifloc® C-319	Coagulation & Flocculation	20mg/L
Clarifloc® C-329	Coagulation & Flocculation	13mg/L
Clarifloc® C-339	Coagulation & Flocculation	20mg/L
Clarifloc® C-349	Coagulation & Flocculation	8mg/L
Clarifloc® C-359	Coagulation & Flocculation	20mg/L
Clarifloc® C-379	Coagulation & Flocculation	13mg/L
Clarifloc® C-389	Coagulation & Flocculation	20mg/L
Clarifloc® C-399	Coagulation & Flocculation	20mg/L

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Polydyne, Incorporated**

P.O. Box 279  
 Riceboro, GA 31323  
 United States  
 800-848-7659

**Facility : # 15 USA**

**Polymer Blends[AL] [PD] [PY]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-2005	Coagulation & Flocculation	154mg/L
Clarifloc® C-2015	Coagulation & Flocculation	162mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PD] Certification is based on a maximum carryover of 50 ug/L DADMAC polymer.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

**Facility : # 25 USA**

**Polyaluminum Chloride[AL]**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Clarifloc® C-1252	Coagulation & Flocculation	250mg/L
Clarifloc® C-1253	Coagulation & Flocculation	250mg/L

Clarifloc® C-1254	Coagulation & Flocculation	250mg/L
Clarifloc® C-1310	Coagulation & Flocculation	250mg/L
Clarifloc® C-1400	Coagulation & Flocculation	250mg/L
Clarifloc® C-1452	Coagulation & Flocculation	250mg/L
Clarifloc® C-1550	Coagulation & Flocculation	250mg/L
Clarifloc® C-1552	Coagulation & Flocculation	250mg/L
Clarifloc® C-1650	Coagulation & Flocculation	250mg/L
Clarifloc® C-1651	Coagulation & Flocculation	250mg/L
Clarifloc® C-1700	Coagulation & Flocculation	250mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

Number of matching Manufacturers is 4  
 Number of matching Products is 323  
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**SNF POLYDYNE**

# CLARIFLOC® A-3333P POLYMER

## PRINCIPAL USES

CLARIFLOC A-3333P is a medium charge anionic polyacrylamide that is used as a flocculant or coagulant aid in a wide variety of mining, municipal, and industrial water and wastewater treatment applications. It has been successfully applied in all liquid/solids separation systems including clarification, thickening, dewatering, and filtration. CLARIFLOC A-3333P can be used alone or in conjunction with other organic and inorganic coagulants. CLARIFLOC A-3333P is approved by the NSF for clarification of potable water at dosages up to 1.0 mg/L.

## TYPICAL PROPERTIES

Physical Form	White Granular Powder
Ionic Nature	Anionic
Anionicity	30 %
pH (0.25% Sol'n)	7-9

## PREPARATION AND FEEDING

CLARIFLOC A-3333P is water soluble, but certain precautions should be followed to obtain total dissolution with minimum loss of activity. Complete wetting of the individual polymer particles is the single most important factor in the preparation of powdered polymer solutions. One method to achieve good wetting is to use an aspirator type disperser that draws the solid polymer particles into the water stream using a vacuum created by water pressure. A water pressure of 30 psig or greater is required to implement this method. The wetted polymer from the aspirator should be discharged into a vessel equipped with a high speed mixer capable of stirring the entire tank. The polymer solution should be stirred for 15-60 minutes or until dissolution is complete. The suggested make-down concentration for CLARIFLOC A-3333P is 0.1 - 0.5 % by weight. Completely automated equipment is commercially available.

## MATERIALS OF CONSTRUCTION

Cross-linked polyethylene, fiberglass, stainless steel or lined steel are the preferred materials for dissolution tanks. Unlined mild steel, black iron, galvanized steel, copper or brass should not be used in any part of the feed system. Stainless steel or PVC are recommended for pump heads and feed lines.

## MANUFACTURING SPECIFICATIONS

% Moisture	< 13
UL Viscosity	5.3 - 6.2 cPs
% Insolubles	< 3.5

## HANDLING AND STORAGE

Suggested in-plant storage of CLARIFLOC A-3333P is one year in unopened bags. Store in a cool, dry area. For spills of dry CLARIFLOC A-3333P, sweep up the material and reuse, if possible. Do not spray water on spilled dry product because the resulting gel is very slippery and difficult to clean up. For spills of CLARIFLOC A-3333P solutions, sprinkle sawdust or vermiculite over the spill area and sweep into approved chemical disposal containers. Rock salt cuts slipperiness.

## SAFETY INFORMATION

CLARIFLOC A-3333P can potentially irritate the skin, eyes and lungs, so gloves, goggles and filter type respirator should be worn while handling this product. CLARIFLOC A-3333P is not readily ignited, but it will support an existing fire. Foam, CO<sub>2</sub> or dry chemical methods should be used because polymer-water mixtures are very slippery. Anyone responsible for the procurement, use or disposal of CLARIFLOC A-3333P should familiarize themselves with the appropriate safety and handling precautions outlined in the POLYDYNE Material Safety Data Sheet. In the event of an emergency with CLARIFLOC A-3333P, contact Chemtrec anytime day or night at (800) 424-9300.

## SHIPPING

CLARIFLOC A-3333P is shipped in 55 pound poly-lined bags with 30 bags to a pallet.

## ADDITIONAL INFORMATION

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

**(800) 848-7659**

ALL STATEMENTS, INFORMATION AND DATA GIVEN HEREIN ARE BELIEVED TO BE ACCURATE AND RELIABLE, BUT ARE PRESENTED WITHOUT GUARANTEE, WARRANTY OR RESPONSIBILITY OF ANY KIND. EXPRESSED OR IMPLIED STATEMENTS OR SUGGESTIONS CONCERNING POSSIBLE USE OF OUR PRODUCTS ARE MADE WITHOUT REPRESENTATION OR WARRANTY THAT ANY SUCH USE IS FREE OF PATENT INFRINGEMENT, AND ARE NOT RECOMMENDATIONS TO INFRINGE ON ANY PATENT. THE USER SHOULD NOT ASSUME THAT ALL SAFETY MEASURES ARE INDICATED OR THAT OTHER MEASURES MAY NOT BE REQUIRED.

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# Material Safety Data Sheet

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

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**Product name :** CLARIFLOC (R) A-3333P POLYMER

**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 :** Granular solid

**Color :** White

**Odor :** None

### Emergency Overview :

Aqueous solutions or powders that become wet render surfaces extremely slippery.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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**Identification :** Anionic water-soluble polymer.

### Regulated Components

None.

## 4. FIRST AID MEASURES

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**Inhalation :** No hazards which require special first aid measures.

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**Material Safety Data Sheet  
CLARIFLOC (R) A-3333P POLYMER**

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

**Eye contact :** Rinse thoroughly with plenty of water, also under the eyelids. In case of persistent eye irritation, consult a physician.

**Ingestion :** The product is not considered toxic based on studies on laboratory animals.

**5. FIRE-FIGHTING MEASURES**

**Unsuitable extinguishing media :** None.

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

**Precautions :** Aqueous solutions or powders that become wet render surfaces extremely slippery.

**Special protective equipment for firefighters :** No special protective equipment required.

**Flash point :** Not applicable.

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

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions :** No special precautions required.

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

**Methods for cleaning up :** Do not flush with water Clean up promptly by sweeping or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE****Handling**

**Safe handling advice :** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Wash hands before breaks and at the end of workday.

**Storage**

Keep in a cool, dry place (0 - 35 °C).

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Engineering measures**

Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

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### Personal protective equipment

**Respiratory protection** : Dust safety masks are recommended where concentration of total dust is more than 10 mg/m<sup>3</sup>.

**Hand protection** : Rubber 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** : Granular solid

**Color** : White

**Odor** : None

**Melting point/range** : Not applicable

**Flash point** : Not applicable

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

**Approx. bulk density** : 0.80

**Water solubility** : Completely miscible

**LogPow** : ~0

### 10. STABILITY AND REACTIVITY

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

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

**Hazardous decomposition products** : Thermal decomposition may produce. Nitrogen oxides (NO<sub>x</sub>). Carbon oxides (CO<sub>x</sub>).

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

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

**Skin** : The results of testing on rabbits showed this material to be non-toxic even at high dose levels.

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

**Irritation**

**Skin :** The results of testing on rabbits showed this material to be non-irritating to the skin.

**Eyes :** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae.

**Sensitization :**

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

**Chronic toxicity :**

A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects.

**12. ECOLOGICAL INFORMATION****Aquatic toxicity**

**Toxicity to fish :** LC50/96 hours > 100 mg/l, (OECD 203), (Based on results obtained from tests on analogous products.).

**Toxicity to daphnia :** LC50/Daphnia m./48 hours > 100 mg/l, (OECD 202), (Based on results obtained from tests on analogous products.).

**Toxicity to algae :** IC50/Scenedesmus subspicatus/72 hours > 100 mg/l. (OECD 201), (Based on results obtained from tests on analogous products.).

**Persistence and degradability :** Not readily biodegradable.

**Hydrolysis :** Does not hydrolyse.

**LogPow :** ~0

**Bioaccumulation :** Does not bioaccumulate.

**13. DISPOSAL CONSIDERATIONS**

**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**

**Remarks :** Not classified as dangerous in the meaning of DOT regulations.

**IMDG/IMO**

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

**ICAO/IATA**

**Remarks :** Not classified as dangerous in the meaning of ICAO/IATA regulations

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**15. REGULATORY INFORMATION**

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**US SARA Reporting Requirements:**

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

**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.

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

**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.

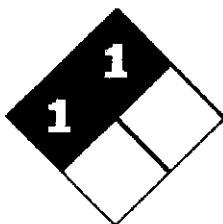
**Philippines (PICCS) :** All components of this product are either listed on the inventory or are exempt from listing.

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**16. OTHER INFORMATION**

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**NFPA and HMIS Ratings :**



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**NFPA :**

Health :	1
Flammability :	1
Instability :	0

**HMIS :**

Health :	1
Flammability :	1
Physical Hazard :	0

**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

**Contact :** Regulatory Affairs Manager: (912)-880-8014

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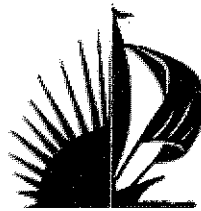
The data in this Material Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge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

***CITY OF FORT LAUDERDALE  
SPECIFICATIONS PACKAGE***

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**413-10709**

**Polymer, Coagulant Aid (Annual Contract)**



**CITY OF FORT LAUDERDALE**

**Bob McKenney**

**954-828-5139**

**NON-COLLUSION STATEMENT:**

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3, \_\_\_\_\_

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

**Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.**

**NAME**

**RELATIONSHIPS**

**None**

**No such relationships exist.**

**In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.**

**BID/PROPOSAL SIGNATURE PAGE**

**How to submit bids/proposals:** It is preferred that bids/proposals be submitted electronically at [www.bidsync.com](http://www.bidsync.com), unless otherwise stated in the bid packet. If mailing a hard copy, it will be the sole responsibility of the Bidder to ensure that the bid reaches the City of Fort Lauderdale, City Hall, Procurement Department, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the bid opening date and time listed. Bids/proposals submitted by fax or email will NOT be accepted.

The below signed hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the CITY and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

**Please Note:** If responding to this solicitation through BidSync, the electronic version of the bid response will prevail, unless a paper version is clearly marked **by the bidder** in some manner to indicate that it will supplant the electronic version. All fields below **must** be completed. If the field does not apply to you, please note N/A in that field.

Submitted by: **Lawrence D. Grizzle 02/23/11**  
(signature) (date)

Name (printed): **Lawrence D. Grizzle** Title: **Business Manager**

Company: (Legal Registration) **Polydyne Inc.**

**CONTRACTOR, IF FOREIGN CORPORATION, MAY BE REQUIRED TO OBTAIN A CERTIFICATE OF AUTHORITY FROM THE DEPARTMENT OF STATE, IN ACCORDANCE WITH FLORIDA STATUTE §607.1501 (visit <http://www.dos.state.fl.us/>).**

Address: **One Chemical Plant Rd.**

City: **Riceboro** State: **GA** Zip: **31323**

Telephone No. **(912) 880-2035** FAX No. **(912) 880-2078**

Email: **polybidpt@snfhc.com**

Delivery: Calendar days after receipt of Purchase Order (section 1.02 of General Conditions): **within 7 days A.R.O.**

Payment Terms (section 1.03): **Net 30 Days, No Discounts**

Total Bid Discount (section 1.04): **N/A**

Does your firm qualify for MBE or WBE status (section 1.08): MBE  WBE

**ADDENDUM ACKNOWLEDGEMENT** - Proposer acknowledges that the following addenda have been received and are included in the proposal:

Addendum No.  
**None Received**

Date Issued

**VARIANCES:** State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of bid, attachments or bid pages. No variations or exceptions by the Proposer will be deemed to be part of the bid submitted unless such variation or exception is listed and contained within the bid documents and referenced in the space provided below. If no

statement is contained in the below space, it is hereby implied that your bid/proposal complies with the full scope of this solicitation. HAVE YOU STATED ANY VARIANCES OR EXCEPTIONS BELOW? BIDDER MUST CLICK THE EXCEPTION LINK IF ANY VARIATION OR EXCEPTION IS TAKEN TO THE SPECIFICATIONS, TERMS AND CONDITIONS. If this section does not apply to your bid, simply mark N/A in the section below.

Variances: **N/A**  
revised 3-23-10