## CITY OF ANN ARBOR INVITATION TO BID



## **Cationic Emulsion Polymer**

ITB No. 4714

Due Date: April 27, 2022 at 2:00 P.M. (Local Time)

Wastewater Treatment Services Unit

Issued By:

City of Ann Arbor Procurement Unit 301 E. Huron Street Ann Arbor, MI 48104

## **TABLE OF CONTENTS**

INSTRUCTIONS TO BIDDERS	3
INVITATION TO BID	8
SPECIFICATIONS	10
BID FORM	12
GENERAL CONDITIONS	13

## **ATTACHMENTS**

City of Ann Arbor Standard Purchase Order Terms and Conditions City of Ann Arbor Vendor Conflict of Interest Disclosure Form City of Ann Arbor Non-Discrimination Ordinance Declaration Form and Notice

#### **INSTRUCTIONS TO BIDDERS**

#### General

The City of Ann Arbor's Procurement Office is soliciting bids for the purchase of approximately 20,000 gallons of Cationic Emulsion Polymer based on the specifications provided herein.

The pricing provided for this ITB shall be firm for one (1) year (July 01,2022- June 30, 2023). Upon mutual agreement between the City and the vendor the pricing provided in this ITB may be extended for three (3) additional one (1) year periods not to exceed four (4) years in total. Any price adjustments in shall be tied to the producer price index for basic chemical manufacturing (PPI code 3251) and renewals will be evaluated if they are in the best interest of the City.

Cationic emulsion polymer must be supplied to the City Wastewater Treatment Plant, fob destination, freight prepaid. The selected bidder will be responsible for transferring the product from the transport vehicle to the City storage vessel.

Each bidder shall provide the City of Ann Arbor with a complete copy of the U.S. Department of Occupational Safety & Health Administration Safety Data Sheet (SDS) and a typical specification sheet for the product with each product bid.

Any Bid which does not conform fully to these instructions may be rejected.

#### Preparation of Bids

Bids should be prepared providing a straight-forward, concise description of the Bidder's ability to meet the requirements of the ITB. Bids shall be written in ink or typewritten. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed and dated in ink by the person signing the Bid.

Bids must be submitted on the "Bid Forms" provided with each blank properly filled in. If forms are not fully completed it may disqualify the bid. No alternative bid will be considered unless alternative bids are specifically requested. If alternatives are requested, any deviation from the specification must be fully described, in detail on a clearly marked "Alternate" section of Bid form.

Each person signing the Bid certifies that he/she is the person in the Bidder's firm/organization responsible for the decision as to the fees being offered in the Bid and has not and will not participated in any action contrary to the terms of this provision.

## Questions or Clarifications / Designated City Contacts

All questions regarding this ITB shall be submitted via email. Emailed questions and inquires will be accepted from any and all prospective Bidders in accordance with the terms and conditions of the ITB.

All questions shall be due on or before April 21, 2022 @ 10:00 AM and should be addressed as follows:

Specification/Scope of Work questions emailed to Keith Sanders, Assistant Manager, Wastewater Treatment Services Unit at Ksanders@a2gov.org

Bid Process and Compliance questions emailed to Colin Spencer, <a href="mailto:CSpencer@a2gov.org">CSpencer@a2gov.org</a>

Any error, omissions or discrepancies in the specification discovered by a prospective contractor

and/or service provider shall be brought to the attention of Colin Spencer at cspencer@a2gov.org after discovery as possible. Further, the contractor and/or service provider shall not be allowed to take advantage of errors, omissions or discrepancies in the specifications.

## Site Inspection

On or prior to April 19, 2022, a bidder may inspect the City's site and equipment. Inspections are by appointment only during business hours (8:00 a.m. to 3:00 p.m). Appointments can be scheduled by email to Keith Sanders, Assistant Manager, Wastewater Treatment Services Unit at Ksanders@a2gov.org. No appointments will be scheduled after this date.

#### Addenda

If it becomes necessary to revise any part of the ITB, notice of the Addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or City of Ann Arbor web site www.A2gov.org for all parties to download.

Each Bidder must in its Bid, to avoid any miscommunications, acknowledge all addenda which it has received, but the failure of a Bidder to receive, or acknowledge receipt of; any addenda shall not relieve the Bidder of the responsibility for complying with the terms thereof.

The City will not be bound by oral responses to inquiries or written responses other than written addenda.

#### **Bid Submission**

All Bids are due and must be delivered to the City of Ann Arbor Procurement Unit on or before, April 27, 2022 at 2:00 p.m. (Local time). Bids submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile will not be considered or accepted.

Each Bidder must submit one (1) original Bid and one (1) Bid copy in a sealed envelope clearly marked: ITB No. 4714 - Cationic Emulsion Polymer.

#### Bids must be addressed and delivered to:

City of Ann Arbor Procurement Unit, c/o Customer Services, 1<sup>st</sup> Floor 301 East Huron Street Ann Arbor, MI 48104

All Bids received on or before the Due Date will be publicly opened and recorded immediately. No immediate decisions are rendered.

The following forms provided within this ITB Document should be included in submitted bids.

- Vendor Conflict of Interest Disclosure Form
- City of Ann Arbor Non-Discrimination Ordinance Declaration of Compliance

Bids that fail to provide these forms listed above upon bid opening may be rejected as non-responsive and may not be considered for award.

Hand delivered bids may be dropped off in the Purchasing drop box located in the Ann Street (north) vestibule of City Hall which is accessible to the public at all hours. Hand delivered bids will

be date/time stamped/signed by the Procurement Unit or City Customer Service at the address above in order to be considered. Normal business hours are 9:00 a.m. to 3:00 p.m. Monday through Friday, excluding Holidays. The City will not be liable to any Bidder for any unforeseen circumstances, delivery or postal delays. Postmarking to the Due Date will not substitute for receipt of the Bid. Each Bidder is responsible for submission of their Bid.

Additional time for submission of bids past the stated due date and time will not be granted to a single Bidder; however, additional time may be granted to all Bidders when the City determines in its sole discretion that circumstances warrant it.

#### Award

The City intends to award a Contract/Purchase Order to the lowest responsible Bidder(s) providing the best value to the City. The City may, at its sole discretion, award line-by-line in the best interest of value to the City.

Responsible bidder means a bid submitted, which conforms in all aspects of the requirements set forth in the invitation to bid. All aspects could include references, past experience, past performance, and qualifications.

#### Official Documents

The City of Ann Arbor officially distributes bid documents from the Procurement Unit or through the Michigan Intergovernmental Trade Network (MITN). Copies of the bid documents obtained from any other source are not Official copies. Addenda and other bid information will only be posted to these official distribution sites. If you obtained City of Ann Arbor Bid documents from other sources, it is recommended that you register on www.MITN.info and obtain an official Bid.

#### Taxes

Municipalities are exempt from Michigan State Sales and Federal Excise taxes. Do not include such taxes in the bid figure(s). The City will furnish the successful bidder with tax exemption certificates when requested.

#### Withdrawal of Bids

After the time of opening, no Bid may be withdrawn for the period of one-hundred and twenty (120) days.

## Non-Discrimination Requirements

All contractors proposing to do business with the City shall satisfy the non-discrimination administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

#### Conflict Of Interest Disclosure

The City of Ann Arbor Purchasing Policy requires that prospective Vendors complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected Vendor unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed

by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Vendor Conflict of Interest Disclosure Form is attached.

#### Debarment

Submission of a Bid in response to this ITB is certification that the Bidder is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

#### Disclosures

After bids are opened, all information in a submitter's bid is subjected to disclosure under the provisions of Michigan Public Act No. 442 of 1976, as amended (MCL 15.231 et seq.) known as the "Freedom of Information Act." The Freedom of Information Act also provides for the complete disclosure of contracts and attachments thereto except where specifically exempted.

#### **Bid Protest**

All Bid protests must be in writing and filed with the Purchasing Agent within five (5) business days of the award action. The bidder must clearly state the reasons for the protest. If a bidder contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the bidder to the Purchasing Agent. The Purchasing Agent will provide the bidder with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by the Offeror to initiate contact with anyone other than the Designated City Contacts provided herein that the prospective Offeror believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

## Cost Liability

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the Bidder prior to the execution of a contract with the City. By submitting a bid, a bidder agrees to bear all costs incurred or related to the preparation, submission and selection process for the bid.

## Reservation of Rights

The City of Ann Arbor reserves the right to accept any bid or alternative bid proposed in whole or in part, to reject any or all bids or alternatives bids in whole or in part and to waive irregularity and/or informalities in any bid and to make the award in any manner deemed in the best interest of the City.

#### **Environmental Commitment**

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City's commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City's environmental principles.

## Chemical Delivery or Supply Insurance Requirements

Insurance: Vendor shall procure and maintain the following insurance during the term of this contract and its performance:

- (1) Worker's compensation insurance as required by law; and automobile (all vehicles) insurance with \$1,000,000 limit;
- (2) Commercial general liability insurance with products/completed-operations coverage, written on a per occurrence basis with \$1,000,000 in coverage per occurrence and \$2,000,000 per job/location aggregate;
- (3) Umbrella liability insurance over all other required insurance, written on a per occurrence basis with \$1,000,000 limit;
- (4) Contractor pollution liability insurance, written on a per occurrence basis, with \$1,000,000 limit including Products pollution liability and Transportation pollution liability.

For all required insurance, the City shall be named an additional insured without added exclusions or limiting endorsements that diminish the City's protections. Further, all insurers shall be authorized to do business in Michigan, and shall carry and maintain a minimum rating of "A-" from A.M. Best and Co., with a minimum financial size category of "V." All required insurance shall be primary to any insurance the City has (including self-insured retention), and any insurance or retention the City has shall not be required to contribute. For itself and all of its insurers, vendor waives its right to recover against the City for liabilities for which the City has insurance. Vendor shall furnish to the City endorsements from its insurers unconditionally entitling the City to 30-days' notice of cancellation or non-renewal, except that in the case of cancellation or non-renewal due to non-payment of premiums, 10-days' notice is sufficient. Vendor shall furnish the City proof of its compliance with these insurance requirements upon demand, through City-approved means (currently MyCOI). Compliance with this section is a condition of City's payment to vendor. Vendor should add registration@mycoitracking.com to its safe-senders list.

#### **INVITATION TO BID**

City of Ann Arbor Guy C. Larcom Municipal Building Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements, Vendor Conflict of Interest Form, Instructions to Bidders, Bid Forms, Purchase Order Terms and Conditions, General Conditions, Detailed Specifications, and all Addenda, and understands them. The Bidder declares that it conducted a full investigation of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

In accordance with these bid documents, and Addenda numbered N/A the undersigned, as Bidder, proposes to deliver to the City all product/services herein described for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

Bidder further agrees that the cited provisions of Chapter 14 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 25th I	DAY OF April, 202 <u>2</u> .
Solenis LLC	
Bidder's Name	Authorized Signature of Bidder
2475 Pinnacle Drive, Wilmington, DE 19803	Jason Burhans
Official Address	(Print Name of Signer Above)
302-502-0830	Bidders@Solenis.com
Telephone Number	Email Address for Award Notice

## **LEGAL STATUS OF BIDDER**

(The Bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is: corporation organized and doing business under the laws of the State NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority A limited liability company doing business under the laws of the State of Delaware whom Jason Burhans bearing the title of Global Pricing Director whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC. (initial here) **Authorized Official** Date April 25 \_\_\_\_\_ <sub>Title</sub> Global Pricing Director (Print) Name Jason Burhans Company: Solenis LLC Address: 2475 Pinnacle Drive \_\_\_\_\_ Fax()<u>no</u> longer use fax Contact Phone (302) 502-0830 Email Bidders@Solenis.com

## **SPECIFICATIONS**

# CITY OF ANN ARBOR STANDARD SPECIFICATIONS FOR CATIONIC EMULSION POLYMER

#### General:

As indicated by testing results, only the following two polymers currently meet the WWTP's flow, production, capture, odor, and dosage requirements. As such they will be the only polymers allowed for pricing, no substitutions.

- SNF Polydyne Clarifloc CE-1540
- BASF Corp. Zetag 8846FS (US)

The supplier must be a recognized manufacturer or authorized representative of the product offered and shall be qualified to advise in its use.

The supplier shall be responsible for stocking and inventorying sufficient quantities of all bid items in order to guarantee that all orders placed against the contract be delivered complete and to the designated delivery site(s) within the time period specified under Lead Time in their bid.

The WWTP must be notified of any modification in the chemical formulation of the polymer by the manufacturer. In such an event, if WWTP staff deem it necessary, the supplier will conduct testing of the re-formulated polymer. The results of the testing will provide evidence of equal or greater effectiveness of the re-formulated polymer with no adverse impact on the WWTP's ability to maintain compliance with all applicable regulations.

#### SHIPPING AND DELIVERY REQUIREMENTS:

Deliveries are to be made with 4,000-5,000 gallon tank trucks equipped with compressors. Start of season and end of season orders may require delivery of the polymer in standard 330 gallon, chemical bulk totes. Estimated number of bulk deliveries between 3-5 orders per year.

Bulk deliveries of 4,000-5,000 gallons will require driver to hook up to a 3" MALE quick connect cam-lock fitting, tank truck will be no closer than 5 feet to loading point.

Normal delivery will be accepted between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday (excluding holidays), unless prior arrangements are made and are acceptable to the WWTP supervisor on duty.

#### SPILLAGE AND CLEANUP:

In the event of spillage of the polymer caused by the supplier or its representative, for example, lack of proper equipment to unload, carelessness, etc, it will be the supplier's responsibility to bear all subsequent cleanup costs.

#### **FREIGHT CHARGES:**

Freight charges to the City of Ann Arbor shall be included in the unit cost of the bid item.

<u>Other Items:</u> Less than 30 days, E. O. M., Proximo, etc. will not be considered in determining the award of the Contract.

Please Check:	We have re	ad the specification	ons and associated	conditions	thoroughly
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<b>√</b> Yes	( )No	
Are all excep	otions to the specifications properly outlined?	None taken
( <b>,)</b> Yes	( )No	

<u>Certification:</u> We hereby certify that the Cationic emulsion polymer provided will meet or exceed the specifications in every respect.

Authorized Representative's Signature

Jason Burhans
Printed Name

<u>References</u>: Please list at least three (3) companies or public agencies for whom you have performed similar work.

<b>ORGANIZATION</b>	ADDRESS CON	TACT PERSON	<u>TELEPHONE</u>
1. City of Columbus	6977 S. HIGH ST., LOCKBOURNE, OH 43137	Ben Roth	(614) 645-3138
Los Angeles 2. County Sanitation		KC Bisto	(307) 752-0796
Fox Metro 3. Water Reclamation	682 State Route 31 Oswego, IL, 60543	Joel Ilseman	(630) 301-6828

## **BID FORM**

VENDOR NAME: Sole	enis LLC		•
All Bidders s	shall submit pricing	in the format requ	uested
SNF Polydyne Clarifloc CE-	-1540		
Polymer	BULK	<sub>\$</sub> NO BID	/POUND
FREIGHT		\$ NO BID	/POUND
TOTAL DELIVERED COST		\$NO BID	/POUND
BASF Corp. Zetag 8846FS	(US)		
Polymer	BULK	\$ <u>1.23</u>	/POUND
FREIGHT		\$ <u>0.09</u>	/POUND
TOTAL DELIVERED COST		\$ <u>1.32</u>	/POUND
• Lead time, N/A  BASF Corp. Zetag 8846FS  • Lead time, 15-20 days  INVOICE TERMS: Discount of 0 % of	(US) s maximum * avera		invoice thirty (30) days
from day of delivery and acceptance.			
OTHER TERMS: Less than 30 days, E contract.	.O.M., Proximo, etc., w	rill not be considered	in determining award of
Polymer shall be supplied to the City o prepaid. Contractor shall be responsible Ann Arbor storage vessel. Bidder shall	ole for transferring the	product from transpo	o.b. destination, freight ort vehicle to the City of
40,000 pounds minimum for bulk de	elivery		<u> </u>
QUANTITY: The annual quantity is apponly, not a guarantee of actual usage. remain firm.	proximately <b>20,000 gall</b> Product will be ordere	ons. This quantity is d on an "as needed"	for estimating purposes basis. All prices are to

#### **GENERAL CONDITIONS**

#### **ESTIMATED QUANTITIES**

Quantities stated are estimated and not guaranteed. The quantities stated will be used for award purposes only and are based up an average of actual annual usage.

#### DOWN PAYMENTS

Any bid proposal submitted which requires a down payment or prepayment of any kind prior to delivery and acceptance of the item, as being in conformance with the specifications will not be considered for award.

#### **PURCHASE ORDER**

The successful bidder will be issued a purchase order from the City of Ann Arbor, which will create a bilateral contract between the City and the successful bidder. The purchase order shall commit the bidder to perform the contract in accordance with the specifications and the terms and conditions of the purchase order.

The terms and conditions of the Purchase Order are provided herein.

#### **CONTRACT TERM**

The pricing provided for this ITB shall be firm for one (1) year (July 01,2022 through June 30,2023). Upon mutual agreement between the City and the vendor the pricing provided in this ITB may be extended for three (3) additional one (1) year periods not to exceed four (4) years in total. Price increases shall be tied to the producer price index for basic chemical manufacturing (code 3251). The vendor shall provide written notice upon renewal that they intend to exercise the price escalation provision and provide documentation of the calculation of price increase.

The price increase shall be calculated as follows:

Price Increase =

Current Bid Price x

Percentage Difference between PPI Data at Month/Year of ITB Acceptance and Month/Year of Price Increase

PPI Source:

https://data.bls.gov/PDQWeb/pc

Example:

Bid Price = \$10/ton

PPI at ITB acceptance (1/1/2015) = 272.8

PPI at Increase Request Date (1/1/2017) = 292.3

Difference as a percentage = 7.1%

New acceptable price = \$10.71

#### City of Ann Arbor: General Terms and Conditions

The following General Terms and Conditions shall apply.

Tax Exemption: The City of Ann Arbor is tax exempt, ID# 38-6004534.

Acceptance of Contract: This order is the City's contract to purchase the goods and services described on the reverse front side of this document from the Vendor. The City's placement of this order is expressly conditioned upon the Vendor's acceptance of all the terms and conditions of purchase contained on or attached to this purchase order. All specifications, drawings, and data submitted to the Vendor with this order are hereby incorporated and made part

**Amendments**: No agreement or understanding to modify this contract shall be binding upon the City unless in writing and signed by the City's authorized agent.

**Delivery:** All prices must be F.O.B. delivery point. Time is of the essence on this contract. If delivery dates cannot be met, the Vendor agrees to advise the City, in writing of the earliest possible shipping date. The City reserves the right to cancel or purchase elsewhere and hold the Vendor accountable.

**Risk of Loss:** Regardless of F.O.B. point, the Vendor agrees to bear all risk of loss, injury, or destruction of goods and materials ordered herein which may for any reason occur prior to delivery or acceptance by the City, whichever is later. No such loss, injury, or destruction shall release the Vendor from any obligations hereunder.

Inspection: Goods and materials must be properly packaged. Damaged goods and materials will not be accepted. The City reserves the right to inspect the goods at a reasonable time subsequent to delivery where circumstances or conditions prevent effective inspection of the goods at the time of delivery. All rejected goods shall be returned to the Vendor at no cost to the City, whether the damage is readily apparent at the time of delivery or later. The City's acceptance is conditioned on such inspection.

Patents and Copyrights: If an article sold and delivered to the City hereunder shall be protected by any applicable patent or copyright, the Vendor agrees to indemnify and save harmless the City, from and against any and all suits, claims, judgments, and costs instituted or recovered against it by any person whomsoever on account of the use or sale of such articles by the City in violation or right under such patent or copyright.

**Uniform Commercial Code:** All applicable portions of the Michigan Uniform Commercial Code shall govern contracts for goods with the City of Ann Arbor; except as modified by contract documents.

**Non-waiver of Rights**: No failure of either party to exercise any power given to it hereunder or to insist upon strict compliance by the other party with its obligations hereunder, and no custom or practice of the parties at variance with the terms hereof, nor any payment under this agreement shall constitute a waiver of either party's right to demand exact compliance with the terms hereof.

**Material Safety Data Sheets:** Applicable Material Safety Data Sheets, in compliance with OSHA/MIOSHA hazard communication regulations/standards, must be provided by the Vendor to the City at the time of purchase.

Assignments: The Vendor agrees not to assign or transfer this contract or any part thereof without the written consent of the City of Ann Arbor, acting through its authorized representative. Any unauthorized assignment may subject the contractor to immediate termination.

Laws Governing, Severability: This contract shall be governed by and construed according to the laws of the State of Michigan. Vendor agrees to submit to the jurisdiction and venue of the Circuit Court of Washtenaw County, MI, or if original jurisdiction is established, the U.S. District Ct. for Eastern District of MI, Southern Division. The Vendor stipulates venues referenced are convenient and waives any claim of non-convenience. If any term herein is found to be ineffective, unenforceable or illegal under any present or future laws, such term shall be fully severable, and the remaining terms shall not be affected and shall remain full force and effect.

**Prevailing Wage:** It shall be the responsibility of the Vendor to comply, when applicable, with the prevailing wage requirements and/or the Davis-Bacon Act as amended.

**Living Wage:** It shall be the responsibility of the Vendor to comply, when applicable, with the City of Ann Arbor's Living Wage Ordinance as defined in Chapter 23, Section 1:811-1:821.

Non-Discrimination: It shall be the responsibility of the Vendor to comply, when applicable, with, all State, Federal and Local non-discrimination laws, including MCL 37.2209 and Section 9:158 of the City Code.

Indemnification: To the fullest extent permitted by law the Vendor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result from any act or omission, associated with the performance of this contract by the Vendor or anyone acting on the Vendor's behalf under this contract. The Vendor shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence. This indemnity survives delivery and acceptance of the Vendor's goods and services.

**Warranty:** The Vendor warrants to the City that all goods and services furnished hereunder will conform in all respects to the terms of this contract, including any drawings, specifications and standards incorporated herein. In addition, the Vendor warrants the goods and services are suitable for and will perform in accordance with the purposes for which they were intended.

**Payment Terms:** The City of Ann Arbor's payment terms are net 30. The payment date will be calculated based on the invoice receipt date or delivery date, whichever is later.

Payments: All invoices for goods and services shall be emailed to accountspayable@a2gov.org. Mailed invoices shall be addressed to the City of Ann Arbor, Accounts Payable, P.O. Box 8647, Ann Arbor, MI 48107, as indicated on the front of this purchase order. Invoices must include the Vendor's name, phone number, and clearly listed item descriptions, quantities and units of measure. The Vendor acknowledges and understands that invoices not addressed as stated above shall have the net 30 begin once the invoice is received by Accounts Payable.

Compliance with Laws: The Vendor certifies that in performing this contract it will comply with all applicable provisions of Federal, State and Local laws, regulations, rules and orders.

Termination for Cause: In the event the Vendor fails, at any time, to comply with, fully perform or strictly adhere to any covenant, condition or representation contained within the contract, the City shall have the right to give written notice to Vendor of such failure. If such failure is not cured to the City's satisfaction within ten (10) business days from the time of delivery to Vendor of such notice, the City shall have the right to terminate immediately without the requirement of a further notice.



## Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

- 1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
- 2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
- 3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
- 4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
- 5. Please note any exceptions below: No exceptions or conflicts

Conflict of Interest Disclosure*		
Name of City of Ann Arbor employees, elected	( ) Relationship to employee	
officials or immediate family members with whom there may be a potential conflict of interest.	( ) Interest in vendor's company     ( ) Other (please describe in box below)	
NONE		

I certify that this Conflict of Interest contents are true and correct to my certify on behalf of the Vendor by my	cnowled	dge and	d belief and I have the authority to so
Solenis LLC		302-5	502-0830
Vendor Name			Vendor Phone Number
QA BA	April 2	5, 2022	Jason Burhans
Signature of Vendor Authorized Representative	Da	ate	Printed Name of Vendor Authorized Representative

<sup>\*</sup>Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

## CITY OF ANN ARBOR DECLARATION OF COMPLIANCE

#### Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

#### The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

Solenis LLC		
Company Name		
OA. PA		April 25, 2022
Signature of Authorized F	Representative	Date
Jason Burhans, Gl	obal Pricing Director	
Print Name and Title		
2475 Pinnacle Drive	, Wilmington, DE 19803	
Address, City, State, Zip		
302-502-0830	Bidders@Solenis.com	)
Phone/Email Address		

Questions about the Notice or the City Administrative Policy, Please contact:

Procurement Office of the City of Ann Arbor

(734) 794-6500

## CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below.

You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

<u>Discriminatory Employment Practices:</u> No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

<u>Discriminatory Effects:</u> No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by email (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk's Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

<u>Private Actions For Damages or Injunctive Relief:</u> To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.



PYM-TDS-NA-Zetag-88 Range

#### Page 1 of 2

## Zetag™ 88 Range Flocculants

#### Description

High molecular weight polyacrylamide-based flocculants, which exhibit varying degrees of cationic charge. They are supplied as viscous free flowing liquids in inverse emulsion form.

#### **Chemical Structure**

Co-polymers of acrylamide and quaternized cationic monomer.

Product	Cationic Charge	Molecular Weight
Zetag 8812S	low	very high
Zetag 8814	medium	high
Zetag 8816	medium-high	very high
Zetag 8818	high	very high
Zetag 8819	very high	very high
Zetag 8844FS	medium	medium
Zetag 8846FS	medium-high	medium
Zetag 8848FS	high	high
Zetag 8849FS	very high	medium
Zetag 8868FS	high	low
Zetag 8828FSB	medium-high	high
Zetag 8847FSB	high	medium
Zetag 8857FSB	high	medium
Zetag 8858FSB	high	medium

#### **Principal Use**

Polyelectrolytes for conditioning a variety of municipal and industrial substrates prior to mechanical or static solid/liquid separation.

These products are not suitable for use in potable water applications. If in any doubt regarding suitability for a given application, please contact your local sales representative.

#### **Benefits**

Highly effective across a wide range of applications (e.g., mechanical dewatering and thickening, flotation and clarification). Operation over a wide pH range (4-9).

#### Storage

The shelf life of the product is minimum 6 months from date of manufacturing if it is stored in its sealed original packaging within a temperature range of 5-25 °C in a dry place.

It is recommended that stock solutions at 0.25 – 0.5% are prepared regularly and for maximum effect such solutions should be used within 5 days. Beyond this period some loss in efficiency of the product may occur.

Depending upon storage conditions and product age, product separation may occur. If separation is observed the product should be re-dispersed well by mixing or re-circulation before use to ensure maximum efficiency.

#### **Shipping & Handling**

As with all cationic polyelectrolytes the product exhibits toxicity towards fish.

It is important that precautions are taken where the product may come into direct contact with fresh water courses, streams and rivers.

Corrosion towards most standard materials of construction is very low. Stainless steel, fiberglass, polyethylene, polypropylene and rubberized surfaces are recommended. In some cases, aluminum surfaces can be adversely affected.

Spilled product is slippery underfoot, very slippery when wet, stir before use. Please refer to the SDS for methods of removing the polymer.

The following materials should be avoided when handling neat inverse emulsions products:

- EPDM (Ethylene Propylene Rubber)
- Natural Rubber
- Polyurethane
- PVC

#### **Technical Service**

Account Managers and Field Service Technicians are available to give advice and assistance in the running of laboratory tests and machine trials to select the correct product and determine the best application conditions.

Continued on page 2.

#### **Packaging**

This product is available in a variety of packaging sizes. Your Solenis representative will recommend the appropriate packaging for the application.

#### Important Information

**Typical Properties:** Refer to the Safety Data Sheet (SDS).

**Regulatory Information:** Refer to the SDS or contact your sales representative for any additional regulatory and environmental information.

**Safety:** Solenis maintains an SDS for all of its products. Use the health and safety information contained in the SDS to develop appropriate product handling procedures to protect your employees and customers.

Our SDS should be read and understood by all of your supervisory personnel and employees before using Solenis products in your facilities.



SOLENIS Strong bonds. Trusted solutions.	Page: 1
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

#### **SECTION 1. IDENTIFICATION**

**Product identifier** 

Trade name

: Zetag™ 8846FS (US) FLOCCULANT

™ Trademark, Solenis or its subsidiaries or affiliates,

registered in various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Flocculating agent

Details of the supplier of the safety data Emergency telephone number 1-844-SOLENIS (844-765-3647) sheet Solenis LLC **Product Information** 500 Hercules Road Contact your local Solenis representative Wilmington, Delaware 19808 United States of America (USA) RegulatoryRequestsNA@solenis.com

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin irritation

Category 2

Eye irritation

Category 2B

**GHS** label elements

Hazard pictograms

Signal word

Warning

Hazard statements

H315 + H320 Causes skin and eye irritation.

Precautionary statements

Prevention:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves.

Response:

STong bonds. Trusted solutions.	Page: 2
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

P362 Take off contaminated clothing and wash before reuse.

#### Other hazards

Material can create slippery conditions.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

#### Components

Chemical name	CAS-No.	Classification	Concentration (%)
ALIPHATIC HYDROCARBON	Trade Secret	Flam. Liq. 4; H227 Asp. Tox. 1; H304	>= 20 - < 30
ALCOHOL ETHOXYLATE	Trade Secret	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 1 - < 1.5

Actual concentration is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled

If breathed in, move person into fresh air.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact

Remove contaminated clothing. If irritation develops, get

medical attention.

If on skin, rinse well with water.

First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

Wash contaminated clothing before re-use.

In case of eye contact

Wash containmated diothing before to doc

Flush eyes with water as a precaution.

Remove contact lenses.

Protect unharmed eye.

SOLENIS Strong bonds. Trusted solutions.	Page: 3
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries  933000	Version: 2.2

If eye irritation persists, consult a specialist.

If swallowed

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

the skin may include:

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

Lung irritation confusion

irregular heartbeat

Convulsions

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this

material.

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when

deciding whether to induce vomiting.

Causes skin and eye irritation.

Notes to physician

No hazards which require special first aid measures.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media :

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray Foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing media

High volume water jet

Specific hazards during

firefighting

: If product is heated above its flash point it will produce vapors

sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the

point of release.

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

Carbon monoxide

Carbon dioxide (CO2) Nitrogen oxides (NOx)

Hydrocarbons

SOLENIS. Strong bonds. Trusted solutions.	Page: 4
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

Specific extinguishing

methods

: Product is compatible with standard fire-fighting agents.

Further information

Material can create slippery conditions.

Water may cause extremely slippery conditions.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Material can create slippery conditions.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Comply with all applicable federal, state, and local regulations.

Environmental precautions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

#### **SECTION 7. HANDLING AND STORAGE**

fire and explosion

Advice on protection against : Normal measures for preventive fire protection.

Advice on safe handling

Avoid spillage on floor as the product can become very

slippery.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

SOLENIS Strong bonds. Trusted solutions.	Page: 5
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries  933000	Version: 2.2

Further information on storage stability

No decomposition if stored and applied as directed.

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

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ALIPHATIC HYDROCARBON	Trade Secret	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL_

**Engineering measures** 

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

#### Personal protective equipment

Respiratory protection

In the case of vapour formation use a respirator with an

approved filter.

Filter type

Type A

Hand protection

Material

nitrile rubber

Remarks

The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection

Not required under normal conditions of use. Wear splash-

proof safety goggles if material could be misted or splashed

into eyes.

Skin and body protection

Wear as appropriate:

Impervious clothing

Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SOLENIS. Strong bonds. Trusted solutions.	Page: 6
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

Wear resistant gloves (consult your safety equipment

Discard gloves that show tears, pinholes, or signs of wear.

Hygiene measures

Wash hands before breaks and at the end of workday.

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

Appearance

emulsion

Colour

white

Odour

hydrocarbon-like

Odour Threshold

: No data available

рΗ

ca. 4

Melting point/freezing point

No data available

Boiling point/boiling range

> 212 °F / > 100 °C

Flash point

: > 212 °F / > 100 °C

Method: ASTM D 92

Evaporation rate

No data available

Flammability (solid, gas)

Not classified as a flammability hazard

Self-ignition

does not ignite

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

No data available

flammability limit

Vapour pressure

No data available

Relative vapour density

No data available

Relative density

No data available

Density

ca. 1.0 g/cm3 (68 °F / 20 °C)

Solubility(ies)

Water solubility

dispersible

SOLENIS Strong bonds. Trusted solutions.	Page: 7
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries  933000	Version: 2.2

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Decomposition temperature

: No data available

Viscosity

Viscosity, dynamic

300 - 1,400 cps (68 °F / 20 °C)

Viscosity, kinematic

: > 20.5 mm2/s (104 °F / 40 °C)

The product has not been tested. The statement has been derived from substances/products of a similar structure or

composition.

Explosive properties

Not explosive

Oxidizing properties

The substance or mixture is not classified as oxidizing.

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity: No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

reactions

Product will not undergo hazardous polymerization.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents strong reducing agents

Hazardous decomposition

products

Carbon monoxide

Carbon dioxide (CO2) Nitrogen oxides (NOx)

Hydrocarbons

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Acute toxicity**

Not classified based on available information.

#### **Components:**

#### **ALIPHATIC HYDROCARBON:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat, male and female): > 5.28 mg/l

SOLENIS. Strong bonds. Trusted solutions.	Page: 8
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries  933000	Version: 2.2

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: No adverse effect has been observed in acute

dermal toxicity tests.

**ALCOHOL ETHOXYLATE:** 

Acute oral toxicity : LD50 (Rat): Expected > 300 - 2,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : irritating

Components:

**ALIPHATIC HYDROCARBON:** 

Result : Mildly irritating to skin

Serious eye damage/eye irritation

Causes eye irritation.

Product:

Species : Rabbit

Result : Slightly to moderately irritating to eyes

Method : OECD Test Guideline 405

Remarks : Unlikely to cause eye irritation or injury.

**Components:** 

**ALIPHATIC HYDROCARBON:** 

Result : Mildly irritating to eyes

**ALCOHOL ETHOXYLATE:** 

Result : Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

SOLENIS Strong bonds. Trusted solutions.	Page: 9
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

#### Respiratory sensitisation

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

IARC No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

#### Reproductive toxicity

Not classified based on available information.

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Aspiration toxicity

Not classified based on available information.

#### Components:

#### **ALIPHATIC HYDROCARBON:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### **Further information**

#### Product:

Remarks : No data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

#### **Product:**

Toxicity to fish : LC50 (Oncorhynchus mykiss): > 10 - 100 mg/l

Exposure time: 96 h Test Type: static test

Remarks: Information given is based on data on the components and the ecotoxicology of similar products.

SOLENIS Strong bonds. Trusted solutions.	Page: 10
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

LC50 (Menidia beryllina (Silverside)): 222 mg/l

Exposure time: 96 h
Test Type: static test
Method: EPA-821-R-02-012

NOEC (Menidia beryllina (Silverside)): 109 mg/l

Exposure time: 96 h
Test Type: static test
Method: EPA-821-R-02-012

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): > 10 - 100 mg/l

Exposure time: 48 h

EC50 (Mysidopsis bahia (opossum shrimp)): 3.06 mg/l

Exposure time: 96 h
Test Type: static test
Method: EPA-821-R-02-012

NOEC (Mysidopsis bahia (opossum shrimp)): 1.29 mg/l

Exposure time: 96 h Test Type: static test Method: EPA-821-R-02-012

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity : Not classified based on available information.

#### Components:

#### **ALIPHATIC HYDROCARBON:**

**Ecotoxicology Assessment** 

Acute aquatic toxicity : No toxicity at the limit of solubility

Chronic aquatic toxicity : No toxicity at the limit of solubility

#### **ALCOHOL ETHOXYLATE:**

**Ecotoxicology Assessment** 

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Not classified based on available information.

#### Persistence and degradability

**Product:** 

Biodegradability : Remarks: At natural pHs (>6), the polymer degrades due to

the hydrolysis to more than 70% in 28 days.

SOLENIS.  Strong bonds. Trusted solutions.	Page: 11
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

Physico-chemical removability

: Remarks: The product can be eliminated from water by abiotic

processes, e.g. adsorption on activated sludge.

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

#### **Product:**

Additional ecological

information

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Harmful to aquatic life.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

#### Disposal methods

Waste from residues

Dispose of in accordance with all applicable local, state and

federal regulations.

The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging

Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

#### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **National Regulations**

**49 CFR** 

SOLENIS Strong bonds. Trusted solutions.	Page: 12
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT  ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

Not regulated as a dangerous good

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

#### The components of this product are reported in the following inventories:

NZIoC : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

TCSI : Not in compliance with the inventory

#### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SOLENIS. Strong bonds. Trusted solutions.	Page: 13
SAFETY DATA SHEET	Revision Date: 07/12/2021
	Print Date: 04/21/2022
	SDS Number: R1201193
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#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

Revision Date : 07/12/2021

#### **Full text of H-Statements**

H227 : Combustible liquid. H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.

H318 : Causes serious eye damage.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity
Asp. Tox. : Aspiration hazard
Eye Dam. : Serious eye damage
Flam. Liq. : Flammable liquids

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -

1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1

Limits for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect

SOLENIS Strong bonds. Trusted solutions.	Page: 14
SAFETY DATA SHEET	Revision Date: 07/12/2021
ORI ETT BATA GITEE!	Print Date: 04/21/2022
	SDS Number: R1201193
Zetag™ 8846FS (US) FLOCCULANT ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 933000	Version: 2.2

Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Safety Data Sheet
Key literature references and sources of data
SOLENIS Internal data
SOLENIS internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

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