Proposal to Provide Biosolids Hauling & Disposal BID 2025-012

to



Submitted on August 14,2025





AUGUST 12, 2025

City of Margate 5790 Margate Blvd. Margate, FL 33063

Re: BID 2025-012

Biosolids Hauling and Disposal

Dear Ladies and Gentlemen:

Synagro South, LLC (Synagro) is pleased to respond to the Invitation to Bid for the City of Margate Biosolids Hauling and Disposal contract. We have enclosed for your review our completed bid package.

Having been in business for over 45 years, Synagro is one of the largest residuals management companies in the country with over 650 municipal and industrial customers and operations in 33 states. We provide ongoing residuals management services to numerous water and wastewater treatment plants throughout Florida and have extensive equipment and personnel resources to perform the services required for this project.

Synagro appreciates this opportunity. Should you have any questions regarding our submittal, please contact me at (813) 495-1060 cdebrunner@synagro.com. We look forward to hearing from you soon. Thank you.

Warm regards,

Curt DeBrunner

Curt DeBrunner Area Sales Manager

CD:ek



Synagro Company Profile

Founded in 1986, Synagro's core business is the environmentally sound and economically viable management of municipal biosolids, including project development, operations and biosolids product distribution. Through this focus, Synagro has grown to be North America's leading provider of high-quality, cost-effective biosolids management and beneficial use solutions. We have been successfully meeting the biosolids management needs of hundreds of generators for more than 45 years. Synagro's experience in all areas of biosolids management is unparalleled.



Synagro annually manages more than 14 million tons of wastewater biosolids and other organic by-products. Synagro employs a team of 1000+ professional engineers, soil scientists, agronomists, construction managers, financial managers and the largest, most diverse operational staff in the industry. Our team is dedicated to working with our clients to find the right solution to their organic residuals management challenges. Synagro, and its subsidiaries, are at the forefront of the environmental movement to safely process and market organic residual materials for beneficial uses.

Synagro owns no proprietary technology which enables us to offer nearly all commercially viable processing options and product marketing channels for biosolids and organic residuals and allows us to develop projects that fit a municipality's unique needs. Our breadth of experience developing, building, financing as necessary, and operating and maintaining the complete range of biosolids options listed below is unique to Synagro.

- Heat-drying and pelletization
- Composting
- Incineration
- Digestion
- Product marketing
- Dewatering (installation and operation)
- Mobile dewatering
- Land application and reclamation
- Lagoon and digester cleaning
- Alkaline stabilization
- Rail transportation

Synagro currently operates 19 heat-drying facilities, three thermal processing facilities serving multiple regional generators, 9 composting facilities (8 of which provide an outlet for numerous generators), more than a dozen alkaline stabilization facilities, and in excess of 75 permanent and mobile dewatering facilities.

Company Profile

YOUR PARTNER FOR A CLEANER, GREENER WORLD



In addition, we provide final product distribution as a key component of many of these projects. Our Product Sales and Marketing team is responsible for successfully managing approximately 300,000 tons per year of AllGro® compost and 170,000 tons of Granulite® fertilizer pellets (heat-dried biosolids). We have unrivalled understanding of the markets for these products and continuously work to broaden the suite of outlets for these materials. As an example, Synagro pioneered the use of heat-dried biosolids as an alternative fuel resource in cement manufacturing. When Synagro operates a facility, we include product distribution services in our operation; however, we also work with municipally operated facilities to assist in managing their products.

In December 2020, Synagro was acquired by West Street Infrastructure Partners III, an infrastructure investment fund managed by Goldman Sachs Merchant Banking Division. Founded in 1869, The Goldman Sachs Group, Inc. is a leading global investment banking, securities, and investment management firm. Goldman Sachs Merchant Banking Division (MBD) is the primary center for the firm's long-term principal investing activity. MBD is one of the leading private capital investors in the world with investments across private equity, infrastructure, private debt, growth equity and real estate.

Company Profile 2

435 Williams Court, Suite 100 Baltimore, MD 21220 www.synagro.com



August 12, 2024

Delegation of Authority Emil Kneis

I, Kaivan Desai, President and Chief Financial Officer of Synagro Technologies, Inc., and all its affiliates and subsidiaries, hereby delegate to Emil Kneis, Sales Support Manager, authority to sign as an officer or as an authorized signatory/person binding proposals, awarded contracts, contract renewals, contract extensions, bid bonds and performance/payment bonds. Also, I delegate to Emil Kneis the authority to sign as an officer or as any authorized signatory/person any business-related applications and other agreements as necessary to provide uninterrupted service to current and new customers.

Such authority does not alter Synagro's internal approval processes. This delegation of authority is valid from the date of this letter until revoked by me.

Kaivan Desai

President and Chief Financial Officer



BID PROPOSAL FORM BID NO. 2025-012

BID TO: CITY COMMISSION CITY OF MARGATE

1. The undersigned bidder proposes and agrees, if this bid is accepted, to enter into an Agreement with the City in the form included in the Contract Documents to perform the Work as specified or indicated in said Contract Documents entitled:

Biosolids Hauling and Disposal

- 2. Bidder accepts all of the terms and conditions of the Contract Documents, including without limitation those in the Notice Inviting Bids and Instructions to Bidders, dealing with the disposition of the Bid Security.
- **3.** The bid will remain open for the period stated in the Notice Inviting Bids unless otherwise required by law. Bidder will enter into an Agreement within the time and in the manner required in the Notice Inviting Bids and the Instructions to Bidders, and will furnish the insurance certificates, payment bond, and performance bond required by the Contract Documents.
- **4.** It is the Contractor's responsibility to contact the City at (954) 935-5346 prior to the bid opening to determine if any addenda have been issued on the project. Bidder has examined copies of all the Contract Documents including the following addenda (receipt of all of which is acknowledged):

Number	None Received	Date	

- **5.** Bidder has familiarized himself with the nature and extent of the Contract Documents, Work, site, locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations), and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary.
- **6.** This bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation. Bidder has not directly or indirectly induced or solicited any other bidder to submit a false or sham bid. Bidder has not solicited or induced any person, firm or corporation to refrain from bidding and bidder has not sought by collusion to obtain for itself any advantage over any other bidder or over the City.

To all the foregoing, and including all Bid Schedule(s) and Information Required of Bidder contained in this Bid Form, said bidder further agrees to complete the Work required under the Contract Documents within the Contract Time stipulated in said Contract Documents, and to accept in full payment thereof the Contract Price based on the Total Bid Price(s) named in the aforementioned Bidding Schedule(s).

NAME OF FIRM:	Synagro South, LLC	
ADDRESS: 435 Willi	ams Court, Suite 100, Baltimo	ere, MD 21220
NAME OF SIGNER_	Emil Kneis (Print	or Type)
TITLE OF SIGNER_	Sales Support Manager	
SIGNATURE:	En Kmed	DATE: 8/12/2025
TELEPHONE NO: 4	10-688-4438	_FACSIMILE NO: 410-779-3558
FMAIL ekneis@syn	agro.com	

SCHEDULE OF BID PRICES - BID NO. 2025-012

CITY OF MARGATE		
(Please fill in all blanks and return with you	ır proposal.)	
In accordance with your request for proposals a undersigned proposes the following:	and the specifications contain	ned herein, the
BIDDER AGREES TO PERFORM ALL THE DOCUMENTS FOR THE FOLLOWING UNIT PRICE SALES TAX AND ALL OTHER APPLICABLE TAXE EXTENDED TOTAL FOR EACH AND EVERY ITE QUANTITY TIMES THE UNIT COST STATED IN FIGURIT AND TOTAL, THE UNIT PREVAILS.	ES OR LUMP SUMS. BIDS S ES AND BIDDER UNDERSTAN EM IS THE RESULT OF MUL	NDS THAT THE
**************	********	***
Option 1: Regular Rates Option 1: Biosolids Hauling, and Disposal Only Per Cubic Yard Price (Regular Rate)	\$ 145.00	Per Cubic Yard
Option 1: Biosolids Hauling and Disposal Only Per-Load Price (30 cubic yards – Regular Rate)	\$ 4,350.00	Per Load (30 - cubic yards)
Option 2: Emergency Rates		
Option 2: Biosolids Hauling and Disposal Only Per Cubic Yard Price (Emergency Rate)	\$ 160.00	Per Cubic Yard
Option 2: Biosolids Hauling and Disposal Only Per-Load Price (30 cubic yards – Emergency Rate)	\$ 4,800.00	Per Load (30 - cubic yards)
*******************	*********	k#
ALL BIDS MUST BE SIGNED WITH THE VENDOR HAVING THE AUTHORITY TO BIND THE COMPAN		OR EMPLOYEE
SAFETY DATA SHEETS ENCLOSED?	YESNO	
SPECIFICATION SHEETS/BROCHURES?	YESNO	<u> </u>
HAVE YOUR INSURANCE REPRESENTATIVE CERTIFICATE TO ENSURE COMPLIANCE.	E REVIEW THE SAMPLE	INSURANCE
WILL YOUR FIRM ACCEPT PAYMENT VIA A CITY VISA CREDIT CARD? PLEASE CHECK ONE	OF MARGATE YESNO✓	

TO: CITY COMMISSION

BIDDER'S GENERAL INFORMATION:

The bidder shall furnish the following information. Additional sheets shall be attached as required. Failure to complete Item Nos. 1, 3, and 7 (if required) will cause the bid to be non-responsive and may cause its rejection. In any event, no award will be made until all of the Bidder's General Information (i.e., items 1 through 7 inclusive) is delivered to the City.

(1)	Synagro South, LLC		
	435 Williams Court Suite 100		
	Baltimore, MD 21220		
(2)	CONTRACTOR'S telephone number: 410-688-4438		
(3)	CONTRACTOR'S license: Primary classification: N/A		
	State License Number:		
	Supplemental classifications held, if any:		
	Name of Licensee, if different from (1) above:		
(4)	Name of person who inspected site of proposed Work for your firm:		
	Name: Curt DeBrunner Date of Inspection: 8/4/2023		
(5)	Name, address, and telephone number of Surety Company and agent who will required bonds on this contract (if required):	provide	the
	Trisura Insurance Company		
	AON Vilma Gonzalez 212-441-1160		

(6) ATTACH TO THIS BID the experience resume of the person who will be designated as

Supervisor for this project.

- (7) ATTACH TO THIS BID, a financial statement (If Required), references, and other information, sufficiently comprehensive to permit an appraisal of CONTRACTOR'S current financial condition.
- (8) Subcontractors: The Bidder further proposes that as part of their submittal there is attached a list of subcontracting firms or businesses who will be awarded subcontracts for portions of the work in the event the bidder is awarded the Contract.

BID BOND

KNO	W ALL MEI	N BY THESE PRESENTS:		
That	we	SYNAGRO SOUTH, LLC		as Principal, and
	TRISUR	RA INSURANCE COMPANY		and firmly bound unto
City	0	ate, hereinafter called "City"	,	\$
		ant Bid (5% of Amount Bid)	dollars, (based on	a yearly average of
9,360	cubic yar	ds, see Special Conditions) for	the payment of which sur	m, well and truly to be
		ourselves, our heirs, executors, ad	ministrators, successors, a	and assigns, jointly and
sever	ally, liffilly i	by these presents.		
		d Principal has submitted a bid to e of the City's Contract Documents		ork required under the
		BID 2025-012 BIOSOLIDS I	HAULING AND DISPOSAL	
the m Agree requir shall l upon	anner requement on the certification of the certifi	ORE, if said Principal is awarded a ired in the "Notice Inviting Bids" and the form of the agreement bound tes of insurance, and furnishes the I void, otherwise it shall remain in any said City and City prevails, saiding a reasonable attorney's fee to be	nd the "Instructions to Bidde Id with said Contract Doo Be required Performance Bo If full force and effect. In the Surety shall pay all costs	ers" enters into a writter cuments, furnishes the ond, then this obligation ne event suit is brough
SIGN	ED and SE	ALED, this 11th day of	August	, 20 <u>25</u>
SYNA	GRO SOUTH,	LLC	TRISURA INSURANCE COMPA	NY
	7 40	CONTRACTOR)	/ (SURETY)	
	SXI		Mana You	h= = = / 6
By:	1 V	Dimus By:		25
	(8	SIGNATURE)	(SIGNATUR	Antic Potter,
STATI	E OF FLORI	DA, COUNTY OF BROWARD:		Attorney-In-Fact
		SONALLY APPEARED THE ABOVE,		
		ECUTED THE FOREGOING INSTRU		
		_ PHYSICAL PRESENCE OR ON OR THE PURPOSES THEREIN EXPRI		THEY EXECUTED SAIL
INSTR	KOWENT FO	THE PURPOSES THEREIN EXPRI	100ED.	
WITNE	ESS MY HA	ND AND OFFICIAL SEAL, THIS 11th	DAY OFAugust	, 20 ²⁵
		~ 1 Dimmaller		
NOTA	RY PUBLIC			
		Vilma Gonzalez		
			VILMA GONZALEZ Commonwealth of Ken	
			Notary Public - Comm. # KYN	NP87102
			My Commission Expires 03-	28-2028



2 Stamford Plaza Suite 1504, 281 Tresser Boulevard Stamford, Connecticut 06901 us.surety@trisura.com

POWER OF ATTORNEY TRISURA INSURANCE COMPANY

TRISURA INSURAI	NCE COMPANY
Bond # N/A	
KNOW ALL MEN BY THESE PRESENTS: That TRISURA INSURANCE COMPA State of Oklahoma, authorized to conduct a surety business, and having in Tresser Boulevard, Stamford, Connecticut 06901, does hereby constitute	ts principal place of business at 2 Stamford Plaza, Suite 1504,
Francesca Kazmierczak, Frances Rodriguez, Aklima Noorhass Sandra Diaz, Debra A. Deming, Vilma Gonzalez	san, Anne Potter, Valorie Spates, Beverly A. Woolford,
their true and lawful attorney(s)-in-fact to execute, seal and deliver for contracts of indemnity and other writings obligatory in the nature there statute, rule, regulation, contract or otherwise, and the execution of spinding upon the said TRISURA INSURANCE COMPANY, as fully and executed and acknowledged by their regularly elected officers at their presents.	eof, which are or may be allowed, required or permitted by law, such instrument(s) in pursuance of these presents, shall be as amply, to all intents and purposes, as if the same had been duly
This Power of Attorney is executed, and may be revoked, pursuant to and COMPANY and is granted under and by authority of the following resolut COMPANY.	d by authority of the By-Laws of TRISURA INSURANCE tion adopted by the Board of Directors of TRISURA INSURANCE
"RESOLVED, that (1) the Chief Executive Officer, President, Executive Victor the Corporation shall have the power to appoint, and to revoke the appoint as defined or limited in their respective powers of attorney, and to execute thereto, bonds, undertakings, recognizances, contracts of indemnity and and (2) any such Officers of the Corporation may appoint and revoke the of process, and Attorneys-in-fact with authority to execute waivers and contract of the Corporation and the Corporation's seal may be affixed execution of any bond, undertaking, recognizance, contract of indemnity such signature and seals when so used whether heretofore or hereafter, of such officer and the original seal of the Corporation, to be valid and though manually affixed."	other written obligation in the nature thereof or related thereto, being hereby adopted by the Corporation and affix the Corporation's seal other written obligations in the nature thereof or related thereto; e appointments of joint-control custodians, agents for acceptance consents on behalf of the Corporation; and (3) the signature of any by facsimile to any power of attorney or certification given for the or other written obligation in the nature thereof or related thereto, being hereby adopted by the Corporation as the original signature.
IN WITNESS WHEREOF, TRISURA INSURANCE COMPANY have eon this 24th day of June, 2025.	STATE OF Connecticut County of Fairfield SEAL
	2 Tomation instruction
Geo	rge James, Chief Underwriting Officer, Surety
On this 24th day of June, 2025, before me came the individual who exec by me duly sworn, said he is the therein described and authorized office instrument are the Corporate Seals of said Companies; that the said Corporates of Directors of Said Companies IN TESTIMONY WHEREOF, I have hereunto set my hand affixed Official S first above written.	porate Seals and his signature were duly affixed by order of the
Tysheena Holeyfield	TYCHENA HOLEVELELD
All MAN . a Notary Public of Connecticut	TYSHEENA HOLEYFIELD Notary Public, Connecticut
My Commission Expires: U - 30 - 30	My Commission Expires 06/30/2030
THE COMMISSION EXPINES.	
CERTIFICATION I, the undersigned officer of TRISURA INSURANCE COMPANY do hereby Attorney and affidavit, and the copy of the Sections of the By-Laws of sa originals on file in the home office of said companies, and that the same originals, and that the said Power of Attorney has not been revoked and	aid Companies as set forth in said Power of Attorney, with the eare correct transcripts thereof, and of the whole of the said
IN TESTIMONY WHEREOF, I have hereunto set my hand on this11th	
P.e	
Ву:	
Name: Terry Michalakos Title: Senior Vice President	The second se

REFERENCE SHEET BID NO. 2025-012

In order to receive Bid Award consideration on the proposed bid, it is a requirement that this sheet be completed and returned with your bid/proposal. This information may be used in determining the bid award for this Project.

BIDDE	ER (COMPANY NAME): Synagro South, LLC		
ADDR	ESS: 435 Williams Court, Suite 100, Baltimore, I	MD 21220	
CONT	ACT PERSON: Emil Kneis	TITLE: Sales Support Mana	ger
TELEF	PHONE: 410-688-4438F	ACSIMILE: 410-779-3558	
NUMB	ER OF YEARS IN BUSINESS: 25		
ADDR	ESS OF NEAREST FACILITY: WM Okeechol	bee Landfill	
	THREE (3) COMPANIES OR GOVERNMENTAL ICES HAVE BEEN PROVIDED IN THE LAST Y		DUCTS OR
1.	COMPANY NAME: Palm Beach County		
	ADDRESS: 2055 W. Canal St Belle Glade FL 33430	PHONE: 561-493-6287	
	CONTACT PERSON: Jose Pozo	TITLE: Chief WWTP Operator	
2.	COMPANY NAME: City of Cooper City		
	ADDRESS: 11791 SW 49th St Cooper City FL 333	30_PHONE: 954-675-8865	
	CONTACT PERSON: Ryan Webster	TITLE: Manager	
3.	COMPANY NAME: St. Lucie County		
	ADDRESS: 450 SW Utility Dr Port St Lucie FL 3	¹⁴⁹⁸⁶ PHONE: 772-979-5723	
	CONTACT PERSON: Mano Sewel	тıтı ⊨ Operation Mgr	

COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A.) BID NO. 2025-012

Bidder certifies that all material, equipment, etc. contained in this bid meet all O.S.H.A. requirements. Bidder further certifies that if he/she is the successful bidder, and the material, equipment, etc., delivered is subsequently found to be deficient in any O.S.H.A. requirement in effect on date of delivery, all costs necessary to bring the material, equipment, etc. into compliance with the aforementioned requirements shall be borne by the bidder.

OCCUPATIONAL HEALTH AND SAFETY DATA SHEET REQUIRED:

In compliance with Chapter 442, Florida Statutes, any item delivered from a contract resulting from this bid must be accompanied by a SAFETY DATA SHEET (SDS). The SDS must include the following information:

- A. The chemical name and the common name of the toxic substance.
- B. The hazards or other risks in the use of the toxic substances, including:
 - 1. The potential for fire, explosion, corrosivity and reactivity;
 - 2. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
 - 3. The primary routes of entry and symptoms of overexposure.
- C. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure.
- D. The emergency procedure for spills, fire, disposal, and first aid.

1 . /

- E. A description in lay terms of the known specific potential health risks posed by the toxic substances intended to alert any person reading this information.
- F. The year and month, if available, that the information was compiled and the name, address and emergency telephone number of the manufacturer responsible for preparing the information.

	5 X			
SIGNATURE:_	(n)	15 med	DATE: 8/12/2025	

CITY OF MARGATE **STATEMENT OF NO BID**

IF YOU DO NOT INTEND TO BID ON THIS PROPOSAL, RETURN THIS FORM TO ADDRESS WHERE BID IS TO BE SUBMITTED: Biosolids Hauling and Disposal

• • •
I/We have declined to bid on your proposal No: 2025-012
Biosolids Hauling and Disposal
For the following reason:
 Specifications are too tight, i.e. geared toward one brand or manufacturer only (Explain reason below) Insufficient time to respond to invitation. We do not offer this commodity/service or equivalent. Our product/service schedule would not permit us to perform. Unable to meet specifications. Unable to meet bonding requirements. Specifications unclear (Explain below). Other (Specify below).
REMARKS:
Attach additional pages if required.
I/We understand that if the NO BID form is not executed and returned, our name may be deleted from the list of qualified bidders for the City of Margate.
COMPANY NAME:
ADDRESS:
TELEPHONE NO:DATE:
SIGNATURE OF BIDDER:

DRUG-FREE WORKPLACE PROGRAM FORM BID NO. 2025-012

In accordance with Section 287.087, State of Florida Statutes, preference shall be given to businesses with Drug-free Workplace Programs. Whenever two or more bids which are equal with respect to price, quality, and service are received for the procurement of commodities or contractual service, a bid received from a business that pertifies librarit has implemented a Drug-free Workplace Program shall be given preference in the award process. In the event that none of the tied vendors has a Drug-free Workplace program in effect, the City reserves the right to make final Decisions in the City's best interest. In order to have a Drug-free Workplace Program, a business shall:

- 1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
- 3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4. In the statement specified in subsection (1), notify employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contenders to, any violation of Chapter 893, Florida Statutes, or of any controlled substance law of the United States of any State, for a violation occurring in the workplace no later than five (5) days after such conviction.
- 5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by any employee who is convicted.
- 6. Make a good faith effort to continue to maintain a drug-free workplace through implementation. If bidder's company has a Drug-free Workplace Program, so certify below:

AS THE PERSON AUTHORIZED TO SIGN THE STATEMENT, I CERTIFY THAT THIS FIRM COMPLIES FULLY WITH THE ABOVE REQUIREMENTS.

SIGNATURE OF BIDDER: MAN DATE: 8/12/2025

OFFEROR'S QUALIFICATION STATEMENT BID NO. 2025-012

The undersigne questions made	ed certifies under oath the truth and correctness of all statements and of a e hereinafter:	ll answers to
SUBMITTED TO	O: City of Margate (Purchasing Division)	
ADDRESS:	5790 Margate Blvd. Margate, FL 33063	
CIRCLE ONE:	LLC Corporation Partnership Individual Other	
SUBMITTED B	Y: Synagro South, LLC	
NAME: Emil Kr	neis	
ADDRESS: 435	Williams Court, Suite 100, Baltimore, MD 21220	
TELEPHONE N	IO.: 410-688-4438	
FACSIMILE NO).: 410-779-3558	
fictitious name corporate docui	the true, exact, correct and complete name of the partnership, corporation under which you do business and the address of the place of business from the State of Florida (sunbiz.org) to this statement.)	
•	ne of the Offeror is: Synagro South, LLC	
	the principal place of business is:	
	Court, Suite 100	
Baltimore, MD	21220	
2. If Offero	r is a corporation, answer the following:	
a. Date of	Incorporation: Formation 6/23/1999	
b. State of	Incorporation: Delaware	
c. Preside	nt's name: Kaivan Desai	
d. Vice Pre	esident's name: N/A	
e. Secreta	ry's name: Alan Slepian	

Treasurer's name: Kaivan Desai

g.	Name and address of Resident Agent:	
	CT Corporation	
	1200 South Pine Island Road	
	Plantation, FL 33324	
•	If Officers is an individual and a decay is a second of the second of th	
3.	If Offeror is an individual or a partnership, answer the following:	
a.	Date of organization:	
b.	Name, address and ownership units of all partners:	
C.	State whether general or limited partnership:	
4.	If Offeror is other than an individual, corporation or partnership, describe the orgagive the name and address of principals:	anization and
5.	If Offeror is operating under a fictitious name, submit evidence of compliance wit Fictitious Name Statute. N/A	h the Florida
6.	How many years has your organization been in business under its present busine	ss name?
	25	
•	Under what other former names has your arranimation or costs 40	
a.	Under what other former names has your organization operated?	
	Synagro South, Inc.	

See Attached		
Have you ever fai why?	led to complete any work awarded to you	u? If so, state when,
No		
	telephone numbers and last known a	
performed or goo preferred as refere	ds you have provided, and to which you	u refer (government o
Mano Sewel 450	SW Utility Dr. Port St Lucie FL 34986	772-979-5723
Mano Sewel 450		772-979-5723 (Phone Number)
Mano Sewel 450 (Name)	SW Utility Dr. Port St Lucie FL 34986	
Mano Sewel 450 (Name) Jose Pozo 2055 V	SW Utility Dr. Port St Lucie FL 34986 (Address)	(Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name)	(Address) V. Canal St. Belle Glade FL 33430 (Address)	(Phone Number) 561-493-6287 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name)	(Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330 (Address)	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent	(Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City Fl 33330 (Address) experience of the key individuals of your	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary	(Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City Fl 33330 (Address) experience of the key individuals of your	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City Fl 33330 (Address) experience of the key individuals of your v). Director of Operations	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary Tod Tucker/ Area Lee Vernon/ Reg	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330 (Address) experience of the key individuals of your v). Director of Operations gional VP	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary Tod Tucker/ Area Lee Vernon/ Reg	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330 (Address) experience of the key individuals of your v). Director of Operations gional VP	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary Tod Tucker/ Area Lee Vernon/ Reg Barry Jarman/ Pro Curt DeBrunner/	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330 (Address) experience of the key individuals of your v). Director of Operations gional VP ject Manager Area Sales Manager	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number)
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Mano Sewel 450 (Name) Jose Pozo 2055 V (Name) Ryan Webster 117 (Name) List the pertinent sheet, if necessary Tod Tucker/ Area Lee Vernon/ Reg Barry Jarman/ Pro Curt DeBrunner/ /	SW Utility Dr. Port St Lucie FL 34986 (Address) V. Canal St. Belle Glade FL 33430 (Address) 791 SW 49th St. Cooper City FI 33330 (Address) experience of the key individuals of your v). Director of Operations gional VP ject Manager Area Sales Manager	(Phone Number) 561-493-6287 (Phone Number) 954-675-8865 (Phone Number) organization (continu

THE OFFEROR ACKNOWLEDGES AND UNDERSTANDS THAT THE INFORMATION CONTAINED IN RESPONSE TO THIS QUALIFICATION STATEMENT SHALL BE RELIED UPON BY OWNER IN AWARDING THE CONTRACT AND SUCH INFORMATION IS WARRANTED BY OFFEROR TO BE TRUE. THE DISCOVERY OF ANY OMISSION OR MISSTATEMENT THAT MATERIALLY AFFECTS THE OFFEROR'S QUALIFICATIONS TO PERFORM UNDER THE CONTRACT SHALL CAUSE THE OWNER TO REJECT THE PROPOSAL, AND IF AFTER THE AWARD TO CANCEL AND TERMINATE THE AWARD AND/OR CONTRACT.

THE AWARD AND/OR CONTRACT.	
Signature:	eb
Maryland State of Florida	
County of Baltimore	
On this the 12 th day of Aug., 20 notarization, the undersigned Notar	before me by means of physical presence or online y Public of the State of Florida, personally appeared and
(Name(s) of individual(s) who appeared	before notary)
whose name(s) is/are Subscribed to he/she/they executed it.	the within instrument, and he/she/they acknowledge that
NOTARY PUBLIC SEAL OF OFFICE:	NOTARY PUBLIC, STATE OF FLORIDA Maryland On stance A Reynolds (Name of Notary Public: Print,
CONSTANCE A. REYNOLDS NOTARY PUBLIC ANNE ARUNDEL COUNTY MARYLAND My Commission Expires 09-06-2027	Stamp or Type as Commissioned.) Personally known to me, or Produced identification:
	(Type of Identification Produced ▼ DID take an oath, or □ DID NOT take an oath

NON-COLLUSIVE AFFIDAVIT FOR BID 2025-012

State of Maryland	
County of Baltimore	
Emil Kneis	being first duly sworn, deposes
and says that:	
He/she is the Sales Support Manager/ Au Representative or Agent) of Synagro has submitted the attached Proposal;	sthorized Signer, (Owner, Partner, Officer, South, LLC, the Offeror that
He/she is fully informed regarding the Proposal and of all pertinent circumstance	ne preparation and contents of the attached es regarding such Proposal;
Such Proposal is genuine and is not a col	lusive or sham Proposal;
colluded, conspired, connived or agree firm, or person to submit a collusive or which the attached Proposal has be connection with such Work; or have it agreement or collusion, or communicatio to fix the price or prices in the attache overhead, profit, or cost elements of the Offeror, or to secure through any	of its officers, partners, owners, agents interest, including this affiant, have in any way d, directly or indirectly, with any other Offeror sham Proposal in connection with the Work for een submitted; or to refrain from bidding in any manner, directly or indirectly, sought by n, or conference with any Offeror, firm, or persond Proposal or of any other Offeror, or to fix any Proposal price or the Proposal price of any other collusion, conspiracy, connivance, or unlawfulpient), or any person interested in the proposed
by any collusion, conspiracy, connivance,	d Proposal are fair and proper and are not tainted or unlawful agreement on the part of the Offeron tives, owners, employees or parties in interest,
Signed, sealed, and delivered in the presence of: Witness	By LA Kmeek
The Hallen	Emil Kneis
Witness / 0	Printed Name
	Sales Support Manager Title
	TIUC

ACKNOWLEDGMENT NON-COLLUSIVE AFFIDAVIT FOR BID 2025-012

Maryland	
State of Florida- County of Baltimore	
County of Baltimore	95
On this the day of day	, 20, before me by means of physical presence
	signed Notary Public of the State of Florida, personally
appeared	
Emil Kneis	
(Name(s) of individual(s) who appeared	before notary)
whose name(s) is/are Subscribed to wit he/she/they executed it.	thin the instrument, and he/she/they acknowledge that
WITNESS my hand	
and official seal.	Constance a Reynolds
	NOTARY PUBLIC, STATE OF FLORIDA Mary land
NOTARY PUBLIC	Cantana A Pennald
SEAL OF OFFICE:	(Name of Notary Public: Print,
	Stamp, or Type as Commissioned)
CONSTANCE A. REYNOLDS	
NOTARY PUBLIC	Personally known to me, or Produced identification
ANNE ARUNDEL COUNTY MARYLAND	□ Floduced identification
My Commission Expires 09-06-2027	
	(Type of Identification Produced)
	DID take an oath, or DID NOT take an oath

SCRUTINIZED COMPANIES CERTIFICATION

I hereby swear or affirm that as of the date below this company is not listed on a Scrutinized Companies list created pursuant to 215.4725, 215.473, or 287.135, Florida Statutes. Pursuant to 287.135, Florida Statutes I further affirm that:

- This company is not participating in a boycott of Israel such that it is not refusing to deal, terminating business activities, or taking other actions to limit commercial relations with Israel, or persons or entities doing business in Israel or in Israeli-controlled territories, in a discriminatory manner.
- 2. This Company does not appear on the Scrutinized Companies with Activities in Sudan List where the State Board of Administration has established the following criteria:
 - Have a material business relationship with the government of Sudan or a government- created project involving oil related, mineral extraction, or power generation activities, or
 - Have a material business relationship involving the supply of military equipment, or
 - c. Impart minimal benefit to disadvantaged citizens that are typically located in the geographic periphery of Sudan, or
 - d. Have been complicit in the genocidal campaign in Darfur.
- 3. This Company does not appear on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List where the State Board of Administration has established the following criteria:
 - Have a material business relationship with the government of Iran or a government- created project involving oil related or mineral extraction activities, or
 - b. Have made material investments with the effect of significantly enhancing Iran's petroleum sector.
- 4. This Company is not engaged in business operations in Cuba or Syria.

VENDOF	R/COMPAN	NY NAME: S	ynagro South	i, LLC	
SIGNATU		ENX.	Kme	.6	
PRINTE	NAME: _	Emil Kneis			
TITLE:	Sales Su	pport Manager	DATE:	8/12/2025	

The scrutinized company list is maintained by the State Board of Administration and available at http://www.sbafla.com/

CITY OF MARGATE E-VERIFY FORM

Project Name:	Biosolids Hauling and Disposal
Project No.:	2025-012

Definitions:

KN

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

- a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and
- b) All persons (including subvendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Margate; and
- c) Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than 20 calendar days after the date of termination. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination and shall be liable for any additional costs incurred by the City as a result of the termination.

COMPANY CONTACT INFORMATI

Company Name. Cyriagio Count, LLC	
Authorized	
Signature: / mess	
Print Name: Emil Kneis	
Title Sales Support Manager	
Date: 8/12/2025	
Phone: 410-688-4438	
Email: ekneis@synagro.com	
Website: www.synagro.com	

BID NO. 2025-012

Company Nama: Synagro South LLC

44



Barry Jarman

Operations Manager

Synagro Technologies, Inc.

Operations Manager, 2019-Present

As Operations Manager for Synagro's Florida biosolids management projects, Barry is responsible for:

- Managing mechanical data and making operational changes as needed.
- Managing and tracking project monthly financials.
- Implementing and maintaining maintenance of company policies and procedures.
- Fostering a culture that promotes a safe work environment through the development and implementation of safety plans and training; maintain environmental and regulatory compliance standards.
- Ensuring appropriate personnel and equipment resources are available for efficient project performance.
- Planning, scheduling, and executing outages/repairs on equipment and systems while not interrupting production.
- Interpreting mechanical data and make operational changes as needed.

Adams Homes / Raney Construction

Construction Superintendent, 2018 - 2019

- Scheduled subcontractors, consultants, and vendors in a critical path to ensure timely completion.
- Performed quality control duties and responsibilities regarding the work being performed.
- Ensured subcontractors were fully executing and complying with their contracted scope of work.
- Coordinated required inspections with local jurisdictions.
- Issued notices of non-compliance to subcontractors, in regards to quality of work or scheduling.
- Walked all units on the project daily to monitor activities and assist in future planning.

EDUCATION

Bachelor of Arts, Social Work, University of West Florida, 2003

Associate of Arts, Pensacola Junior College, 1998

- Confined Space Certification
- Hydraulic Torque Machine certification
- Transformers: 120V to 35KV
- Multi-Meter: voltmeter, amp meter, megohmmeter and wattmeter
- Electrical schematics, blueprints and point-topoint drawings
- SAP and Maximo Training
- OSHA 10 Certified
- NFPA 70e Certified



Axis Renewables / ISP

Resource/Project Manager, 2016 - 2018

- Monitored day to day project activities and resourcing, identify potential instances of underutilization and actively work with department leads to address and resolve those issues.
- Monitored staffing and resources against assigned projects in order to meet deadlines and budgets.
- Drive projects to final stages of completion by keeping the team on track to complete assignments under budget. Managed job data and timesheets, using Excel and other programs, for client approval.
- Lead daily safety discussions, equipment inspections and daily stretching. Reviewed and approved all daily EHS required paperwork at the job sites.

British Petroleum

Facility Manager - Commissioning/Construction Supervisor, 2012 - 2016

- Responsible for daily operations of the largest Wind Farm in Pennsylvania and the largest single-phase Wind Farm on the East Coast.
- Team Safety Lead, creating a morning stretch program that was the benchmark across all BP Wind Farms, proven to reduce workplace injuries. Maintained all Safety documentation.
- Performed maintenance tasks at a Substation that fed an 115kv line to the grid.
- Utilized a computer-based maintenance system (SCADA) to identify trends, take corrective action and to maintain turbine performance.
- Oversaw Construction and Commissioning for GE 1.6 turbine platform from start to completion, supervising contractors and assigning daily tasks and performing QA/QC walkdowns.

Gamesa

Site Manager - Site Commissioning/Construction Supervisor, 2008 - 2012

- Responsible for all day-to-day operations, maintenance, financials, SAP, fiscal and administrative functions for the site.
- Performed the first Generator swap without a crane in the U.S. on a Gamesa Turbine.
- Supervised construction/commissioning contractors, of Gamesa Turbines, at Locust Ridge/Sandy Ridge Wind Farms, and was site manager of Locust Ridge, closing out the warranty after the contract was completed. Also closed out the warranty phase of Bear Creek as well.
- Managed Wind Farm used as testing site for new turbine software upgrades, providing technicians and technical support to the Engineering department.
- Utilized a computer-based maintenance system (SCADA) to identify trends, take corrective action and to maintain turbine performance.
- Organized the daily schedules for all subcontractors, as well as the on-call schedules.



General Electric

Manufacturing Leader, 2001 - 2008

- Performed final inspections on wind turbine machine heads to ensure zero defects before delivering product to the customer. Created manufacturing instructions to maintain quality & uniformity throughout the machine head build process.
- Tester for the GE 1.5-megawatt Wind Turbines on completed Machine Heads using various electrical testing tools, schematics, prints and point-to-point drawings to ensure delivery of a zerodefect product to the customer.
- Member of the GE Winding Team for GE 324 Generators that completed a unit in fewer than 2000 labor-hours with no overtime, which had never been accomplished in the history building GE generators.
- Utilized 5W's and Fishbone Diagrams to identify root cause analysis for rework and overdue projects, so that a target solution can be implemented.
- Incorporated Six Sigma, Lean Manufacturing and Kaizen fundamentals for continuous improvement on the production line.

Barry Jarman, Operations Manager

Barry Jarman joined Synagro in 2019 as Operations Manager for Synagro's Florida biosolids management projects. In this role he is responsible for the day-to-day management of various projects including management of dewatering operations mechanical data any needed operational changes, tracking monthly project financials, implementation and maintenance of company policies and procedures, promoting a safe work environment through the development and implementation of safety plans and training, and maintaining environmental and regulatory compliance standards.

Before coming to Synagro Barry held various construction and project management roles spanning an 18 year career with such companies as Axis Renewables/ISP, British Petroleum, and General Electric. In 2003 he was nominated by his peers to lead the transfer of technology training for Wind Turbine assembly at the GE Energy Pensacola factory. Barry also served as a member of the United States Army in Operation Restore Hope stationed in Somalia as an Electronic Maintenance Shop Supervisor, providing communication repair in a combat environment.

Barry holds a Bachelor of Arts degree in Social Work from the University of West Florida. He is certified in Confined Space Entry and OHSA 10 certified.



Tod Tucker

Area Director

Synagro Technologies, Inc.

Area Director, June 2022 - Present

As Area Director for Synagro's Florida biosolids management projects, Tod manages over 40 projects and a staff of 16 supervisors and operators. He is responsible for:

- Start-up and successful project completion, annual \$20MM budget management, as well as overseeing capital improvements and investments and customer relations.
- Operations and compliance with local, state and federal regulations related to biosolids land application.
- Coordination of equipment rental as needed and assists operations managers with subcontractor management and equipment issues.
- Budgeting and job cost development for new projects.

Tod is experienced operating belt filter presses, rubber tire loaders, farm tractors and farm equipment, pumps, grinders, jockey trucks and trailers, end dump trailers, vacuum pumps, liquid spreading equipment, and other required project equipment for Synagro's operations.

American Materials Company

Operations Manager, December 2017- May 2022

Plant Manager, Buckhorn Quarry, January 2017 - December 2017

- Help implemented AMC safety program and Summit's 5s initiative.
- Managed nine sand mine operations and one future marine limestone greenfield site.
- Lead an annual budget of \$10 million and oversee necessary capital improvements.
- Successfully integrated two sand mine acquisitions in the Charleston and Columbia markets.
- Coordinated the conversion of two dry mine sites to dredge operations and installed new dredge at recently acquired brownfield site

EDUCATION

Shepherd University – Political Science



- Heavily involved in mine and plant design for future marine limestone operation.
- Oversaw plant operations for a 1 million plus ton granite quarry, promoting a safe workplace, leading an annual budget of \$7 million.

Martin Marietta

District Production Manager, NC East District, December 2013 - September 2016

- Managed operations for seven granite quarries, one marine limestone quarry, and a shipyard facility.
- Led an annual operations budget of \$40+ million and spearheaded capital improvements of \$5
 million annually. Consistently maximized resources, improved efficiencies, and improved
 profitability.
- Developed a mobile equipment program to improve equipment availability and extend asset life, coordinating a new program that improved the mobile fleet availability to over 90%.
- Successfully received approval to relocate 2000 linear feet of stream and mitigate 20 acres of wetland to gain 40 million tons of reserves.
- Worked with City Council and neighboring communities to receive approval for rezoning 100 acres, relocate city thorough fare to gain an additional 25 million tons of reserves.

Plant Manager, Raleigh-Durham Quarry, April 2005 - December 2013

Coordinated operations for a 1 million ton-per-year facility and managed an additional 400,000 ton-per-year facility. Oversaw necessary capital improvements and led an annual budget of over \$8 million.

Plant Manager, Anderson Creek Quarry, March 2003 - April 2005

- Oversaw plant operations and managed an 800,000 ton-per-year granite quarry, promoting a safe workplace, leading an annual budget of \$4 million, overseeing capital improvements.
- Continually analyzed and evaluated processes and procedures, improving profitability year-overyear.

Tod Tucker, Area Director

As Area Director for Synagro's Florida biosolids management projects, Tod Tucker manages over 40 projects and a staff of 16 supervisors and operators. He is responsible for start-up and successful project completion, as well as overseeing capital improvements/investments, and customer relations. Project operations under Tod's oversight includes compliance with local, state, and federal regulations related to biosolids land application and other disposal services; coordination of equipment rental and subcontractor management as needed; and budgeting and job cost development for new projects.

Prior to joining Synagro in 2022 Tod worked in various management roles for American Materials Company where he was responsible for management of sand mine operations and future marine limestone greenfield site. Tod also has quarry management experience during his ten years with Martin Marietta.



Lee Vernon

Regional Vice President

Synagro Technologies, Inc.

Regional Vice President, Southeast Region, 2022 - Present Leadership for all residuals and biosolids management operations, sales, and technical services strategies throughout Florida, Georgia, Tennessee, Alabama, Mississippi, Louisiana and Arkansas. Project performance and customer satisfaction are the primary focus of leadership throughout the region.

Area Director, West Coast, 2020 - 2022

Responsible for all service operations in California, Oregon, Washington, and Nevada, including transport and disposal, land application, municipal WWTP cleaning, dewatering, and dredging, and industrial dewatering and dredging projects.

Senior Operations Manager, Philadelphia Renewable Biofuels Facility, 2019 – 2020

Managed day-to-day operations of Synagro Philadelphia, one of the country's largest biosolids dewatering and drying facilities with eight dewatering centrifuges and two Andritz DDS-120 dryers that process approximately 65,000 dry tons/year.

Solmax (formerly GSE Environmental) *Operations Manager*, 2018 – 2019

Responsible for 65+ person team within Production, Maintenance, and Compounding departments in plastics blown film extrusion plant with 10 production lines. Managed day-today plant operations.

Maintenance Manager, 2018 -2018

Managed the Factory Maintenance and Engineering Team and oversaw corrective and preventative maintenance. Implemented Preventative Maintenance and Reliability Program and the Total Productive Maintenance Program.

EDUCATION

UNIVERSITY OF VIRGINIA

Bachelor of Science Mechanical Engineering

UNIVERSITY OF NORTH CAROLINA

Master of Business Administration

CERTIFICATIONS

- Lean Six Sigma, Green Belt
- Mechanical E.I.T.



GSE Environmental

Production Manager, 2017 -2018

Responsible for safe, quality production of all GSE Houston geomembrane, drainage, and lab lines.

Process Engineer / Sr. Process Engineer, 2015 – 2017

Analyzed and sought to improve all processes related to blown film extrusion.



Curt DeBrunner

Area Sales Manager

Synagro Technologies, Inc.

Area Sales Manager (2022- present)

Joined Synagro in 2022 as the Area Sales Manager for the Florida Region. Mr. DeBrunner's primary duties are to develop cost effective, compliant and sustainable solutions for both existing and potential clients. Mr. DeBrunner's role requires project management, P&L management, regulatory compliance, contract negotiations, and team management.

Mr. DeBrunner has over 26 years of experience working in the environmental services and waste management industries. He has extensive experience in working with Federal, State and Municipal areas as well has private and industrial industries. He is experienced with the regulatory environment and is trained in management of special wastes and hazardous waste (RCRA certified) Mr. DeBrunner is experienced with DOT compliance, landfill compliance, alternative disposal technologies and methods to create sustainable solutions.

ACCOUNT DEVELOPMENT MANAGER

Clean Harbors Environmental Services, Bartow, FL / Dec 2020 - 2022

- Hunter role new accounts, underpenetrated in FL, GA, AL
- Entire portfolio of CHES facilities & services
- Corporate utilities, chemical, manufacturing, pharmaceutical
- Salesforce proficiency, health & safety focused

SENIOR ACCOUNT EXECUTIVE

US Ecology, Tampa, FL / 1996-2020

- Responsible for municipal HHW accounts, universities and education lab pack business, engineering firms throughout Southeastern US
- Managed 70% of 67 FL county HHW programs revenue, \$4M annually, municipal industrial and field services
- Managed sales territories, developed and grew new and existing accounts to \$8M+ annually

EDUCATION

UNIVERSITY OF FLORIDA

Bachelor of Science Degree – Environmental Engineering

LICENSES AND CERTIFICATIONS

40-Hr HAZWOPER
 Annual 8-Hr. Refresher
 RCRA, DOT HM-141
 Training, E.I.T Environmental
 Engineering, IHMM
 Member, NAHMMA
 Board of Directors

Curt DeBrunner, Area Sales Manager

Curt DeBrunner joined Synagro in 2022 as the Area Sales Manager for the company's Florida region. Curt's primary duties are to develop cost effective, compliant, and sustainable solutions for both existing and potential clients. His role requires project management, P&L management, regulatory compliance, contract negotiations, and team management.

Having previously worked for Clean Harbors Environmental Services and US Ecology, Curt has over 26 years of experience working in the environmental services and waste management industries. He has extensive experience in working with Federal, State and Municipal areas as well has private and industrial industries. He is experienced with the regulatory environment and is trained in management of special wastes and hazardous waste (RCRA certified). Curt is also experienced with DOT compliance, landfill compliance, alternative disposal technologies and methods to create sustainable solutions.

Curt holds a Bachelor of Science in Environmental Engineering from the University of Florida.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

Jonathan P. Steverson Secretary

Permit Issued to:

Berman Road Landfill
Okeechobee Landfill, Inc.
10800 NE 128th Avenue,
Unincorporated Okeechobee County, Florida
863-357-0824

WACS Facility ID No.: 70436 Facility Name: Berman Road Landfill Facility Address: 10800 NE 128th Avenue Unincorporated Okeechobee County, Florida

Contact Person:
Tony Bishop, District Manager

10800 NE 128th Avenue, Okeechobee, Florida 34972

<u>Tbishop2@wm.com</u>

863-357-0824

Solid Waste Construct/Operate Permit – Class I Landfill Permit Nos.: 0040842-048-SC and 0040842-049-SO, 0040842-052-SC-MM, 0040842-053-SO-MM, 0040842-054-SO-MM, 0040842-056-SO-MM and 0040842-058-SO-IM

Replace Permit Nos.: 004842-026-SC; 004842-027-SC-MM; 004842-029-SO-MM; 004842-030-SC-MM; 004842-031-SC-MM; 004842-032-SC-MM; 004842-039-SC-MM; 004842-040-SO-MM; 004842-043-SO-MM; and 004842-046-SO-MM;

Permit Issued: September 7, 2016 Permit Renewal Application Due Date: July 8, 2036 Permit Expires: September 7, 2036

Permitting Authority:
Florida Department of Environmental Protection
Solid Waste Program & Permitting
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400



OKEECHOBEE LANDFILL

10800 N.E. 128th Avenue Okeechobee, FL 34973 800 963 4776

HOURS OF OPERATION

5:00am - 4:00pm Monday - Friday 7:00am - 12:00pm Saturday

Okeechobee Landfill

Serving greater south/central Florida, Okeechobee Landfill provides local businesses and industry with professional disposal services that are safe, convenient and meet the highest standards for environmental compliance.

Containment Design

Okeechobee Landfill protects the environment by ensuring that all waste is contained and isolated from soil and groundwater. This site utilizes a geosynthetic double-composite liner.

Groundwater Monitoring

Groundwater is monitored semi-annually by 24 perimeter and interior monitoring wells.

Landfill Gas Management

This site collects and manages landfill gas to generate renewable energy, reduce emissions, and prevent odor. The system collects landfill gas through vertical and horizontal pipes within the landfill. It collects approximately 3,000 cubic feet per minute of landfill gas.

Leachate Collection & Treatment

Leachate is managed by injection into a fully-permitted on-site underground injection well capable of receiving over 3 MGD.

YEAR OPENED

1992

PROJECTED LIFE REMAINING

150 years

FACILITY ACREAGE

4,100 acres

PERMITTED FOOTPRINT

969 permitted acres

REMAINING PERMITTED CAPACITY

215,196,453 tons

TONS PROCESSED ANNUALLY

1.0 million tons approximately

OWNERSHIP

Okeechobee Landfill, Inc.

PERMIT TYPE & PERMIT

Solid Waste Permit #0040842-026-SC, Environmental Resources Permit #SI 47-0131315-018 and Title V Permit #0930104-011-AV

NUMBER OF EMPLOYEES

21



Acceptable Material

Asbestos - Friable

Asbestos - Non-Friable

Auto Shredder Residue

Biosolids

CERCLA Waste

Construction and Demolition (C&D) Debris

Industrial and Special Waste

Unacceptable Material

Hazardous Waste

Additional Services Provided

Hydration of Dry Ash Wastes

Organic Waste Composting

Recycling of Yard Waste, Tires, White Goods and Organic Wastes

Transportation Services

Underground Injection of Non-hazardous Liquid Wastes

Approval Process

Waste Management has a defined waste screening protocol for each of its non-hazardous waste facilities, which protects both our employees and the environment. For all industrial and special waste streams, the generator or agent must complete a waste profile (available online at wmsolutions.com) for review by our technical staff.

Risk Mitigation

Waste Management provides the highest level of services, backed with state-of-the-art site design and management systems, to minimize risks and reduce liabilities from fines, lawsuits, sanctions or other legal or regulatory actions.

Community Partnerships and Involvement

Waste Management is proud to be an active supporter of community events and programs that make our area a cleaner and healthier place to live, work and play.

THIS FACILITY ALSO SUPPORTS THE FOLLOWING EVENTS, CHARITIES, SCHOOLS AND SERVICE GROUPS:

All Florida Junior Team Rodeo

American Cancer Society Relay for Life

Kiwanis of Okeechobee

March of Dimes

Real Life Children's Ranch

Okeechobee Cattlemen's Association

Okeechobee Chamber of Commerce

Okeechobee County Schools

Liquid Waste (Non-hazardous)

Municipal Solid Waste (MSW)

Vegetative Waste, Animal Byproducts and Manure for Composting

Tires

Yard Waste

Okeechobee Economic Development Council

Okeechobee Educational Foundation

Okeechobee Main Street

Okeechobee Youth Livestock Show and Sale

Waste Management Local Scholarships



CONTACT

Technical Support
TSC Emelle
205 652 9721 or 800 963 4776
TSCAlabama@wm.com

COMMUNITY RELATIONS

Teresa Chandler 863 824 4013 or tchandler@wm.com

COMMUNITIES SERVED

Central and Southern Florida



©2013 Waste Management

State of Florida Department of State

I certify from the records of this office that SYNAGRO SOUTH, LLC is a Delaware limited liability company authorized to transact business in the State of Florida, qualified on February 17, 2006.

The document number of this limited liability company is M06000000941.

I further certify that said limited liability company has paid all fees due this office through December 31, 2024, that its most recent annual report was filed on April 2, 2024, and that its status is active.

I further certify that said limited liability company has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Second day of January, 2025



Secretary of State

Tracking Number: 9830985692CU

To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication



Department of State / Division of Corporations / Search Records / Search by Entity Name /

Detail by Entity Name

Foreign Limited Liability Company SYNAGRO SOUTH, LLC

Filing Information

Document Number

M06000000941

FEI/EIN Number

76-0612567

Date Filed

02/17/2006

State

DE

Status

ACTIVE

Principal Address

435 Williams Court

Suite 100

Baltimore, MD 21220

Changed: 03/07/2025

Mailing Address

435 Williams Court

Suite 100

Baltimore, MD 21220

Changed: 03/07/2025

Registered Agent Name & Address

C T CORPORATION SYSTEM

1200 SOUTH PINE ISLAND ROAD

PLANTATION, FL 33324

Authorized Person(s) Detail

Name & Address

Title Member

Synagro - WWT, Inc.

435 Williams Court

Suite 100

Baltimore, MD 21220

Title VP

Schwartz, Michael 435 Williams Court Suite 100 Baltimore, MD 21220

Annual Reports

Report Year	Filed Date
2023	03/02/2023
2024	04/02/2024
2025	03/07/2025

Document Images

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02/17/2006 - Foreign Limited	View image in PDF format
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February 20, 2006

FLORIDA DEPARTMENT OF STATE Division of Corporations

SYNAGRO SOUTH, LLC 4512 BRITTMOORE RD. HOUSTON, TX 77041

Qualification documents for SYNAGRO SOUTH, LLC were filed on February 17, 2006, and assigned document number M06000000941. refer to this number whenever corresponding with this office.

Your limited liability company is now qualified and authorized to transact business in Florida as of the file date. In accordance with section 608.406(2), F.S., the name of this limited liability company is filed with the Department of State for public notice only and is granted without regard to any other name recorded with the Division of Corporations.

This document was electronically received and filed under FAX audit number H06000044836.

A limited liability company annual report/uniform business report will be due this office between January 1 and May 1 of the year following the calendar year of the file date. A Federal Employer Identification (FEI) number will be required before this report can be filed. If you do not already have an FEI number, please apply NOW with the Internal Revenue by calling 1-800-829-3676 and requesting form SS-4.

Please be aware if the limited liability company address changes, it is the responsibility of the corporation to notify this office.

Should you have any questions regarding this matter, please contact thisoffice at the address given below.

Deborah Bruce Document Specialist Registration/Foreign Qualification Letter Number: 406A00011725 Division of Corporations

APPLICATION BY FOREIGN LIMITED LIABILITY COMPANY FOR AUTHORIZATION TO TRANSACT BUSINESS IN FLORIDA

LI.	TOMPLIANCE WITH SECTION 608.503, FLORIDA STATUTES, THE FOLLOWING IS SUBMITTED TO REGISTER A FOREIGN MITED LIABILITY COMPANY TO TRANSACT BUSINESS IN THE STATE OF FLORIDA:
	Synagro South, LLC
	(Name of Foreign Limited Liability Company)
2.	
•	Delaware (Jurisdiction under the law of which foreign limited liability 3. 76-0612567 (FEI number, if applicable)
4.	12/31/2005
	(Date of Organization) 5. Perpetual (Duration: Year limited liability company will cease to
_	exist or "perpetual")
6.	(Data Graders)
	(Date first transacted business in Florida, if prior to registration.) (See sections 608.501 & 608.502 F.S. to determine penalty liability)
7.	4512 Brittmoore Road
	Houston, TX 77041
	(Street Address of Principal Office)
8.	If limited liability company is a manager-managed company, check here X
9.	The name and usual business addresses of the managing members or managers are as follows:
	Synagro-WWT, Inc., 1800 Bering Drive, Suite 1000, Houston, TX 77057
	English Drive, State 1000, Houston, 1X 77057
•	
is in	Attached is an original certificate of existence, no more than 90 days old, duly authenticated by the official having ody of records in the jurisdiction under the law of which it is organized. (A photocopy is not acceptable. If the certificate a foreign language, a translation of the certificate under oath of the translator must be submitted.)
11.]	Nature of business or purposes to be conducted or promoted in Florida:
_	Residuals Management Services
	Signature of a member or an authorized representative of a member. (In accordance with section 608.408(3), F.S., the execution of this document constitutes an affirmation under the penalties of perjury that the facts stated herein are true.) Alvin L. Thomas Typed or printed name of signee Vice President & Secretary, Synagro-WWT, Inc Manager

CERTIFICATE OF DESIGNATION OF REGISTERED AGENT/REGISTERED OFFICE

PURSUANT TO THE PROVISIONS OF SECTION 608.415 or 608.507, FLORIDA STATUTES, THE UNDERSIGNED LIMITED LIABILITY COMPANY SUBMITS THE FOLLOWING STATEMENT TO DESIGNATE A REGISTERED OFFICE AND REGISTERED AGENT IN THE STATE OF FLORIDA.

1. The name of	the Limited Liability Company is:
Synagr	o South, LLC
2. The name and	the Florida street address of the registered agent and office are:
	C T Corporation System
	(Name)
_	1200 South Pine Island Road
	Florida Street Address (P.O. Box NOT ACCEPTABLE)
	Plantation, Florida 33324
	City/State/Zip
agent and agree to relating to the pro	and as registered agent and to accept service of process for the above stated limited at the place designated in this certificate, I hereby accept the appointment as registered act in this capacity. I further agree to comply with the provisions of all statutes over and complete performance of my duties, and I am familiar with and accept the position as registered agent as provided for in Chapter 608, Florida Statutes. Proporation System (Signature) Denise Bell Assistant Secretary

\$ 100.00 Filing Fee for Application
\$ 25.00 Designation of Registered Agent
\$ 30.00 Certified Copy (optional)
\$ 5.00 Certificate of Status (optional)

Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HERBEY CERTIFY "SYNAGRO SOUTH, LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE FIRST DAY OF FEBRUARY, A.D. 2006.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN PAID TO DATE.



Varnet Smith Windson Harriet Smith Windson, Secretary of State

3060217 8300

060098035

AUTHENTICATION: 4493886

DATE: 02-01-06



Material Name: Gasoline All Grades

SDS No. 9950

US GHS

Synonyms: Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation 1 Hess Plaza

Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS Emergency # 800-424-9300 CHEMTREC

www.hess.com (Environment, Health, Safety Internet Website)

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquid - Category 2

Skin Corrosion/Irritation - Category 2

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Toxic to Reproduction - Category 1A

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow,

nervous system)

Aspiration Hazard - Category 1

Hazardous to the Aquatic Environment - Acute Hazard - Category 3

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapour.

Causes skin irritation.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

Material Name: Gasoline All Grades SDS No. 9950

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and forearms thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe mist/vapours/spray.

Use only outdoors or in well-ventilated area.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Response

In case of fire: Use water spray, fog, dry chemical fire extinguishers or hand held fire extinguisher.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Get medical advice/attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

Storage

Store in a well-ventilated place.

Keep cool. Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
86290-81-5	Gasoline, motor fuel	100
108-88-3	Toluene	1-25
106-97-8	Butane	<10
1330-20-7	Xylenes (o-, m-, p- isomers)	1-15
95-63-6	Benzene, 1,2,4-trimethyl-	<6
64-17-5	Ethyl alcohol	0-10
100-41-4	Ethylbenzene	<3
71-43-2	Benzene	0.1-4.9

Material Name: Gasoline All Grades

SDS No. 9950

110-54-3 Hexane 0.5-4

A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol). Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration.

Unsuitable Extinguishing Media

None

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Material Name: Gasoline All Grades

SDS No. 9950

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

USE ONLY AS A MOTOR FUEL. DO NOT SIPHON BY MOUTH

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Page 4 of 16	Revision Date 8/30/12	

Material Name: Gasoline All Grades

SDS No. 9950

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Incompatibilities

Keep away from strong oxidizers.

* * * Section 8 - Exposure Controls / Personal Protection * *

Component Exposure Limits

Gasoline, motor fuel (86290-81-5)

ACGIH: 300 ppm TWA

500 ppm STEL

Toluene (108-88-3)

ACGIH: 20 ppm TWA

OSHA: 200 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

NIOSH: 100 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

Butane (106-97-8)

ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)

OSHA: 800 ppm TWA; 1900 mg/m3 TWA NIOSH: 800 ppm TWA; 1900 mg/m3 TWA

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA

150 ppm STEL

OSHA: 100 ppm TWA; 435 mg/m3 TWA

150 ppm STEL; 655 mg/m3 STEL

Benzene, 1,2,4-trimethyl- (95-63-6)

NIOSH: 25 ppm TWA; 125 mg/m3 TWA

Ethyl alcohol (64-17-5)

ACGIH: 1000 ppm STEL

OSHA: 1000 ppm TWA; 1900 mg/m3 TWA NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

Material Name: Gasoline All Grades

SDS No. 9950

Ethylbenzene (100-41-4)

ACGIH: 20 ppm TWA

OSHA: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

NIOSH: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

Benzene (71-43-2)

ACGIH: 0.5 ppm TWA

2.5 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: 0.1 ppm TWA

1 ppm STEL

Hexane (110-54-3)

ACGIH: 50 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 500 ppm TWA; 1800 mg/m3 TWA NIOSH: 50 ppm TWA; 180 mg/m3 TWA

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Material Name: Gasoline All Grades SDS No. 9950

Section 9 - Physical & Chemical Properties

Appearance: Translucent, straw-colored or Odor: Strong, characteristic aromatic

> light yellow hydrocarbon odor. Sweet-ether

like

Physical State: Liquid ND :Ha

Vapor Pressure: 6.4 - 15 RVP @ 100 °F (38 °C) Vapor Density: AP 3-4

(275-475 mm Hg @ 68 °F (20

Boiling Point: 85-437 °F (39-200 °C) Melting Point: ND Specific Gravity: Solubility (H2O): Negligible to Slight 0.70-0.78

Evaporation Rate: 10-11 VOC: ND Percent Volatile: 100% Octanol/H2O Coeff.: ND -45 °F (-43 °C) Flash Point: Flash Point Method: PMCC

Upper Flammability Limit 7.6% Lower Flammability Limit 1.4% (UFL):

(LFL):

Burning Rate: ND Auto Ignition: >530°F (>280°C)

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

* * * Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Gasoline, motor fuel (86290-81-5)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat 14000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Butane (106-97-8)

Inhalation LC50 Rat 658 mg/L 4 h

Material Name: Gasoline All Grades

SDS No. 9950

Xylenes (o-, m-, p- isomers) (1330-20-7)

Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

Benzene, 1,2,4-trimethyl- (95-63-6)

Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 3400 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Ethyl alcohol (64-17-5)

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Ethylbenzene (100-41-4)

Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg

Benzene (71-43-2)

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Moderate irritant. Contact with liquid or vapor may cause irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product may cause genetic defects.

Carcinogenicity

A: General Product Information

May cause cancer.

Material Name: Gasoline All Grades

SDS No. 9950

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

B: Component Carcinogenicity

Gasoline, motor fuel (86290-81-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Ethyl alcohol (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic

beverages) (Group 1 (carcinogenic to humans))

Ethylbenzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Benzene (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1

(carcinogenic to humans))

Reproductive Toxicity

This product is suspected of damaging fertility or the unborn child.

Specified Target Organ General Toxicity: Single Exposure

This product may cause drowsiness or dizziness.

Material Name: Gasoline All Grades

SDS No. 9950

Specified Target Organ General Toxicity: Repeated Exposure

This product causes damage to organs through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Gasoline, motor fuel (86290-81-5)

Test & Species Conditions
96 Hr LC50 Alburnus alburnus 119 mg/L [static]

96 Hr LC50 Cyprinodon variegatus 82 mg/L [static] 72 Hr EC50 Pseudokirchneriella 56 mg/L

subcapitata

24 Hr EC50 Daphnia magna 170 mg/L

Toluene (108-88-3)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 15.22-19.05 mg/L [flow-through]
96 Hr LC50 Pimephales promelas 12.6 mg/L [static] 5.89-7.81 mg/L

96 Hr LC50 Oncorhynchus mykiss [flow-through] 14.1-17.16 mg/L

96 Hr LC50 Oncorhynchus mykiss 5.8 mg

5.8 mg/L [semistatic]

96 Hr LC50 Lepomis macrochirus 11.0-15.0 mg/L

[static]

96 Hr LC50 Oryzias latipes 54 mg/L [static] 96 Hr LC50 Poecilia reticulata 28.2 mg/L [semi-

static]

96 Hr LC50 Poecilia reticulata 50.87-70.34 mg/L

[static]

96 Hr EC50 Pseudokirchneriella >433 mg/L

subcapitata

72 Hr EC50 Pseudokirchneriella 12.5 mg/L [static]

subcapitata

48 Hr EC50 Daphnia magna 5.46 - 9.83 mg/L

[Static] 48 Hr EC50 Daphnia magna 11.5 mg/L

Xylenes (o-, m-, p- isomers) (1330-20-7)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 13.4 mg/L [flow-

through]

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr LC50 Oncorhynchus mykiss	2.661-4.093 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	13.5-17.3 mg/L
96 Hr LC50 Lepomis macrochirus	13.1-16.5 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	19 mg/L
96 Hr LC50 Lepomis macrochirus	7.711-9.591 mg/L [static]
96 Hr LC50 Pimephales promelas	23.53-29.97 mg/L [static]
96 Hr LC50 Cyprinus carpio	780 mg/L [semi- static]
96 Hr LC50 Cyprinus carpio	>780 mg/L
96 Hr LC50 Poecilia reticulata	30.26-40.75 mg/L [static]
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

Benzene, 1,2,4-trimethyl- (95-63-6) **Test & Species**

96 Hr LC50 Pimephales promelas

96 Hr LC50 Oncorhynchus mykiss

48 Hr EC50 Daphnia magna

Conditions

7.19-8.28 mg/L [flow-through] 6.14 mg/L

12.0 - 16.0 mL/L

9268 - 14221 mg/L

10800 mg/L

2 mg/L [Static]

11.0-18.0 mg/L [static]

4.2 mg/L [semi-

32 mg/L [static]

9.6 mg/L [static]

9.1-15.6 mg/L [static]

7.55-11 mg/L [flow-

static]

through]

Ethyl alcohol (64-17-5)

Test & Species

[static] 96 Hr LC50 Pimephales promelas >100 mg/L [static] 96 Hr LC50 Pimephales promelas 13400 - 15100 mg/L [flow-through]

48 Hr LC50 Daphnia magna 24 Hr EC50 Daphnia magna 48 Hr EC50 Daphnia magna

Conditions

Ethylbenzene (100-41-4)

Test & Species

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Pimephales promelas

96 Hr LC50 Lepomis macrochirus

96 Hr LC50 Pimephales promelas

96 Hr LC50 Poecilia reticulata 72 Hr EC50 Pseudokirchneriella

subcapitata

96 Hr EC50 Pseudokirchneriella

subcapitata

72 Hr EC50 Pseudokirchneriella

subcapitata

Conditions

4.6 mg/L

>438 mg/L

2.6 - 11.3 mg/L

[static]

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr EC50 Pseudokirchneriella 1.7 - 7.6 mg/L subcapitata [static] 48 Hr EC50 Daphnia magna 1.8 - 2.4 mg/L

Benzene (71-43-2)

Test & Species96 Hr LC50 Pimephales promelas

10.7-14.7 mg/L

| [flow-through] | 5.3 mg/L [flow-through] | 5.3 mg/L [flow-through] | 96 Hr LC50 Lepomis macrochirus | 22.49 mg/L [static] | 96 Hr LC50 Pimephales promelas | 22330-41160 μg/L [static] | 96 Hr LC50 Lepomis macrochirus | 70000-142000 μg/L |

72 Hr EC50 Pseudokirchneriella [static] 29 mg/L

subcapitata 48 Hr EC50 Daphnia magna

48 Hr EC50 Daphnia magna 8.76 - 15.6 mg/L [Static] 48 Hr EC50 Daphnia magna 10 mg/L

Hexane (110-54-3) Test & Species

Test & Species96 Hr LC50 Pimephales promelas

2.1-2.98 mg/L [flow-

through] 24 Hr EC50 Daphnia magna >1000 mg/L

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

Material Name: Gasoline All Grades

SDS No. 9950

** Section 14 - Transportation Information ***

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

DOT Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

Placard:



** Section 15 - Regulatory Information ***

Regulatory Information

A: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Toluene (108-88-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Benzene, 1,2,4-trimethyl- (95-63-6)

SARA 313: 1.0 % de minimis concentration

Ethylbenzene (100-41-4)

SARA 313: 0.1 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Benzene (71-43-2)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an

August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on

potential carcinogenicity in an August 14, 1989 final rule)

Material Name: Gasoline All Grades

SDS No. 9950

Hexane (110-54-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 5000 lb final RQ; 2270 kg final RQ

SARA Section 311/312 - Hazard Classes

Acute Health

Chronic Health

<u>Fire</u>

Sudden Release of Pressure

Reactive

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Gasoline, motor fuel	86290-81-5	No	No	No	No	Yes	No
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	No
Butane	106-97-8	Yes	Yes	Yes	Yes	Yes	No
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes	No
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes	No
Ethyl alcohol	64-17-5	Yes	Yes	Yes	Yes	Yes	No
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	Yes	No
Benzene	71-43-2	Yes	Yes	Yes	Yes	Yes	No
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer. WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Material Name: Gasoline All Grades

SDS No. 9950

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Toluene	108-88-3	1 %
Butane	106-97-8	1 %
Benzene, 1,2,4-trimethyl-	95-63-6	0.1 %
Ethyl alcohol	64-17-5	0.1 %
Ethylbenzene	100-41-4	0.1 %
Benzene	71-43-2	0.1 %
Hexane	110-54-3	1 %

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS#	TSCA	CAN	EEC
Gasoline, motor fuel	86290-81-5	No	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Butane	106-97-8	Yes	DSL	EINECS
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EINECS
Benzene, 1,2,4-trimethyl-	95-63-6	Yes	DSL	EINECS
Ethyl alcohol	64-17-5	Yes	DSL	EINECS
Ethylbenzene	100-41-4	Yes	DSL	EINECS
Benzene	71-43-2	Yes	DSL	EINECS
Hexane	110-54-3	Yes	DSL	EINECS

Section 16 - Other Information * * *

NFPA® Hazard Rating

Health

2

0

Fire

3 Reactivity 0

HMIS® Hazard Rating

Health

2 Moderate

Fire

Serious

Physical

Minimal

*Chronic

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

Material Name: Gasoline All Grades

SDS No. 9950

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

Page 16 of 16

Common Name: ANTIFREEZE/COOLANT

Manufacturer: PRESTONE PRODUCTS

SDS Revision Date: 4/16/2014 SDS Format: GHS-US

Item Number(s): 48RD30

Manufacturer Model Number(s):

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PRESTONE (R*)

SDS501

PRESTONE (R*) ANTIFREEZE/COOLANT

DATE PREPARED: 04/16/2014

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION A top

SDS ID: SDS 501

PRODUCT NAME: PRESTONE (R*) ANTIFREEZE/COOLANT

PRODUCT NUMBER:

AF2000X, AF2000L, AF2050, AF2055, 72025, 71605, 71621, PRES04C, AF2000UK, AF2000PL. AF2000-1KL, AF2000LRU, AF2000RU, 65069, AF2000/GF, AF2000/GFC, AF2055/GF, AF2000-1KL/GF, AF2000/GXF, AF2000/GXF-HT, 71621/GF, 71621/GFC, 71621/GFC3

FORMULA NUMBER:

YA956BY, YA956BY-B, YA956BY-ED, YA956BY-ED-B, YA-956BY-GLY, YA-992

MANUFACTURER:

PRESTONE PRODUCTS CORPORATION

DANBURY, CT 06810-5109

CANADIAN OFFICE:

FRAM GROUP (CANADA), INC.

MISSISSAUGA, ONTARIO L5L 3S6

MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:

(800)890-2075 (IN THE US)

(800)668-9349 (IN CANADA)

TRANSPORTATION EMERGENCY PHONE NUMBER (CHEMICAL SPILLS AND TRANSPORT

ACCIDENTS ONLY):

CHEMTREC: 1-800-424-9300 (IN THE US)

CANUTEC: (613)996-6666 (IN CANADA)

SDS DATE OF PREPARATION/REVISION: 04/16/14

PRODUCT USE: AUTOMOBILE ANTIFREEZE - CONSUMER PRODUCT

RESTRICTIONS ON USE: NONE IDENTIFIED

2. HAZARDS IDENTIFICATION A top

GHS/HAZCOM 2012 CLASSIFICATION:

HEALTH

ACUTE TOXICITY: CATEGORY 4

NOT HAZARDOUS

PHYSICAL

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE:

CATEGORY 2

REPRODUCTIVE TOXICITY: CATEGORY 2

LABEL ELEMENTS: EXCLAMATION MARK

HEALTH HAZARD

WARNING!

H302: HARMFUL IF SWALLOWED.

H361D: SUSPECTED OF DAMAGING THE UNBORN CHILD.

H373: MAY CAUSE DAMAGE TO KIDNEYS THROUGH PROLONGED OR REPEATED EXPOSURE.

PREVENTION:

P201: OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.

P202:

DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.

P260: DO NOT BREATHE MIST OR VAPORS.

P264: WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING.

P270: DO NOT EAT, DRINK, OR SMOKE WHEN USING THIS PRODUCT.

P281: USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED.

RESPONSE:

P301 + P312:

IF SWALLOWED: CALL A POISON CENTER OR PHYSICIAN IF YOU FEEL UNWELL.

P330: RINSE MOUTH.

P308 + P313:

IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE.

DISPOSAL:

P405: STORE LOCKED UP.

P501:

DISPOSE OF CONTENTS AND CONTAINER IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS.

3. COMPOSITION/INFORMATION ON INGREDIENTS A top

COMPONENT	CAS NO.	AMOUNT
ETHYLENE GLYCOL	107-21-1	75-95%
2-ETHYL HEXANOIC ACID, SODIUM SALT	19766-89-3	1-5%
NEODECANOIC ACID, SODIUM SALT	31548-27-3	1-5%
DIETHYLENE GLYCOL	111-46-6	0-5%
THE EXACT CONCENTRATIONS ARE A TRADE	SECRET.	

4. FIRST AID MEASURES A top

INHALATION:

REMOVE THE VICTIM TO FRESH AIR. IF BREATHING HAS STOPPED ADMINISTER ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, HAVE MEDICAL PERSONNEL ADMINISTER OXYGEN. GET MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING. IMMEDIATELY WASH CONTACTED AREA THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

INGESTION:

SEEK IMMEDIATE MEDICAL ATTENTION. IMMEDIATELY CALL LOCAL POISON CONTROL CENTER OR GO TO AN EMERGENCY DEPARTMENT. NEVER GIVE ANYTHING BY MOUTH TO OR INDUCE VOMITING IN AN UNCONSCIOUS OR DROWSY PERSON.

MOST IMPORTANT SYMPTOMS:

MAY CAUSE EYE IRRITATION. INHALATION OF MISTS MAY CAUSE NOSE AND THROAT IRRITATION AND NERVOUS SYSTEM EFFECTS. INGESTION MAY CAUSE ABDOMINAL DISCOMFORT OR PAIN, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, MALAISE, BLURRING OF VISION, IRRITABILITY, BACK PAIN, DECREASE IN URINE OUTPUT, KIDNEY FAILURE, AND CENTRAL NERVOUS SYSTEM EFFECTS.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: SEEK IMMEDIATE MEDICAL ATTENTION FOR LARGE INGESTIONS.

NOTES TO PHYSICIAN:

THE PRINCIPAL TOXIC EFFECTS OF ETHYLENE GLYCOL, WHEN SWALLOWED, ARE KIDNEY DAMAGE AND METABOLIC ACIDOSIS. THE COMBINATION OF METABOLIC ACIDOSIS, AN OSMOL GAP AND OXALATE CRYSTALS IN THE URINE IS EVIDENCE OF ETHYLENE GLYCOL POISONING. PULMONARY EDEMA WITH HYPOXEMIA HAS BEEN DESCRIBED IN A NUMBER OF PATIENTS FOLLOWING POISONING WITH ETHYLENE GLYCOL. RESPIRATORY SUPPORT WITH MECHANICAL VENTILATION MAY BE REQUIRED. THERE MAY BE CRANIAL NERVE INVOLVEMENT IN THE LATE STAGES OF TOXICITY FROM SWALLOWED ETHYLENE GLYCOL. IN PARTICULAR, EFFECTS HAVE BEEN REPORTED INVOLVING THE SEVENTH, EIGHTH, AND NINTH CRANIAL NERVES, PRESENTING WITH BILATERAL FACIAL PARALYSIS, DIMINISHED HEARING AND DYSPHAGIA.

ETHANOL IS ANTIDOTAL AND ITS EARLY ADMINISTRATION MAY BLOCK THE FORMATION OF NEPHROTOXIC METABOLITES OF ETHYLENE GLYCOL IN THE LIVER. THE OBJECTIVE IS TO RAPIDLY ACHIEVE AND MAINTAIN A BLOOD ETHANOL LEVEL OF APPROXIMATELY 100 MG/DL BY GIVING A LOADING DOSE OF ETHANOL FOLLOWED BY A MAINTENANCE DOSE. INTRAVENOUS ADMINISTRATION OF ETHANOL IS THE PREFERRED ROUTE. ETHANOL BLOOD LEVELS SHOULD BE CHECKED FREQUENTLY. HEMODIALYSIS MAY BE REQUIRED. 4-METHYL PYRAZOLE (FOMEPIZOLE(R*)), A POTENT INHIBITOR OF ALCOHOL DEHYDROGENASE, HAS BEEN USED THERAPEUTICALLY TO DECREASE THE METABOLIC CONSEQUENCES OF ETHYLENE GLYCOL POISONING. FOMEPIZOLE(R*) IS EASIER TO USE CLINICALLY THAN ETHANOL, DOES NOT CAUSE CNS DEPRESSION OR HYPOGLYCEMIA AND REQUIRES LESS MONITORING THAN ETHANOL. ADDITIONAL THERAPEUTIC MODALITIES WHICH MAY DECREASE THE ADVERSE CONSEQUENCES OF ETHYLENE GLYCOL METABOLISM ARE THE ADMINISTRATION OF BOTH THIAMINE AND PYRIDOXINE. AS THERE ARE COMPLICATED AND SERIOUS OVERDOSES, WE RECOMMEND YOU CONSULT WITH THE TOXICOLOGISTS AT YOUR POISON CONTROL CENTER.

5. FIREFIGHTING MEASURES A top

SUITABLE EXTINGUISHING MEDIA:

FOR LARGE FIRES, USE ALCOHOL TYPE OR ALL-PURPOSE FOAMS. FOR SMALL FIRES, USE WATER SPRAY, CARBON DIOXIDE OR DRY CHEMICAL.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

A SOLID STREAM OF WATER OR FOAM DIRECTED INTO HOT, BURNING LIQUID CAN CAUSE FROTHING. BURNING MAY PRODUCE CARBON MONOXIDE AND CARBON DIOXIDE. SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT SPRAY POOL FIRES DIRECTLY. FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF- CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING FOR FIRES IN AREAS WHERE CHEMICALS ARE USED OR STORED.

6. ACCIDENTAL RELEASE MEASURES A top

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: WEAR APPROPRIATE PROTECTIVE CLOTHING AND EQUIPMENT (SEE SECTION 8). METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP: COLLECT WITH ABSORBENT MATERIAL AND PLACE IN APPROPRIATE, LABELED CONTAINER FOR DISPOSAL OR, IF PERMITTED FLUSH SPILL AREA WITH WATER.

7. HANDLING AND STORAGE A top

PRECAUTIONS FOR SAFE HANDLING:

HARMFUL OR FATAL IF SWALLOWED. DO NOT DRINK ANTIFREEZE OR SOLUTION. AVOID EYE AND PROLONGED OR REPEATED SKIN CONTACT. AVOID BREATHING VAPORS OR

MISTS. WASH EXPOSED SKIN THOROUGHLY WITH SOAP AND WATER AFTER USE. DO NOT STORE IN OPENED OR UNLABELED CONTAINERS. KEEP CONTAINER AWAY FROM OPEN FLAMES AND EXCESSIVE HEAT. DO NOT REUSE EMPTY CONTAINERS UNLESS PROPERLY CLEANED. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND MAY BE DANGEROUS. DO NOT CUT, WELD, DRILL, ETC. CONTAINERS, EVEN EMPTY.

SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, OR SUDDEN INGRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS WITHOUT ANY OBVIOUS IGNITION SOURCES. PUBLISHED "AUTOIGNITION" OR "IGNITION" TEMPERATURES CANNOT BE TREATED AS SAFE OPERATING TEMPERATURES IN CHEMICAL PROCESSES WITHOUT ANALYSIS OF THE ACTUAL PROCESS CONDITIONS. USE OF THIS PRODUCT IN ELEVATED TEMPERATURE APPLICATIONS SHOULD BE THOROUGHLY EVALUATED TO ASSURE SAFE OPERATING CONDITIONS.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORE AWAY FROM EXCESSIVE HEAT AND OXIDIZERS.

NFPA CLASSIFICATION: IIIB

8. EXPOSURE CONTROLS / PERSONAL PROTECTION 🛕 top

EXPOSURE GUIDELINES:

CHEMICAL

CHEMICAL

ETHYLENE GLYCOL (AS AEROSOL)

2-ETHYL HEXANOIC ACID, SODIUM SALT NEODECANOIC ACID, SODIUM SALT

DIETHYLENE GLYCOL

VENTILATION:

EXPOSURE LIMIT

100 MG/M3 CEILING ACGIH TLV

NONE ESTABLISHED NONE ESTABLISHED

10 MG/M3 TWA AIHA WEEL

USE GENERAL VENTILATION OR LOCAL EXHAUST AS REQUIRED TO MAINTAIN EXPOSURES BELOW THE OCCUPATIONAL EXPOSURE LIMITS.

RESPIRATORY PROTECTION:

FOR OPERATIONS WHERE THE TLV IS EXCEEDED A NIOSH APPROVED RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES AND DUST/MIST PREFILTERS OR SUPPLIED AIR RESPIRATOR IS RECOMMENDED. EQUIPMENT SELECTION DEPENDS ON CONTAMINANT TYPE AND CONCENTRATION. SELECT AND USE IN ACCORDANCE WITH 29 CFR 1910.134 AND GOOD INDUSTRIAL HYGIENE PRACTICE. FOR FIREFIGHTING, USE SELF-CONTAINED BREATHING APPARATUS.

GLOVES:

CHEMICAL RESISTANT GLOVES SUCH AS NEOPRENE OR PVC WHERE CONTACT IS POSSIBLE.

EYE PROTECTION: SPLASH-PROOF GOGGLES. OTHER PROTECTIVE EQUIPMENT/CLOTHING:

APPROPRIATE PROTECTIVE CLOTHING AS NEEDED TO MINIMIZE SKIN CONTACT.

9. PHYSICAL AND CHEMICAL PROPERTIES 🛕 top

APPEARANCE: YELLOW LIQUID ODOR: CHARACTERISTIC ODOR

ODOR THRESHOLD: NONE

PH: 8.7-9.2

MELTING/FREEZING POINT:

-34 DEG. F (-36.6 DEG. C) - -36 DEG. F (-37.7 DEG. C)

BOILING POINT/RANGE: 327 DEG. F (164 DEG. C) - 340 DEG. F (171.1 DEG. C)

FLASH POINT:

254 DEG. F (123 DEG. C) TOC

>230 DEG. F (>110 DEG. C) SETAFLASH

EVAPORATION RATE: NOT DETERMINED

FLAMMABILITY (SOLID, GAS): NOT APPLICABLE

FLAMMABILITY LIMITS: LEL: NOT DETERMINED UEL: NOT DETERMINED

VAPOR PRESSURE: <0.06 MM Hg @20 DEG. C

VAPOR DENSITY: 2.1

RELATIVE DENSITY: 1.07-1.14 SOLUBILITIES WATER: COMPLETE

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT DETERMINED

AUTOIGNITION TEMPERATURE: NOT DETERMINED DECOMPOSITION TEMPERATURE: NOT DETERMINED

VISCOSITY: NOT DETERMINED

10. STABILITY AND REACTIVITY A top

REACTIVITY: NORMALLY UNREACTIVE

CHEMICAL STABILITY: STABLE

POSSIBILITY OF HAZARDOUS REACTIONS:

REACTION WITH STRONG OXIDIZERS WILL GENERATE HEAT.

CONDITIONS TO AVOID: NONE KNOWN

INCOMPATIBLE MATERIALS:

AVOID STRONG BASES AT HIGH TEMPERATURES, STRONG ACIDS, STRONG OXIDIZING AGENTS, AND MATERIALS REACTIVE WITH HYDROXYL COMPOUNDS.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE.

11. TOXICOLOGICAL INFORMATION 🛆 top

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION:

MAY CAUSE IRRITATION OF THE NOSE AND THROAT WITH HEADACHE, PARTICULARLY FROM MISTS. HIGH VAPOR CONCENTRATIONS CAUSED, FOR EXAMPLE, BY HEATING THE MATERIAL IN AN ENCLOSED AND POORLY VENTILATED WORKPLACE, MAY PRODUCE NAUSEA, VOMITING, HEADACHE, DIZZINESS AND IRREGULAR EYE MOVEMENTS. SKIN CONTACT: NO EVIDENCE OF ADVERSE EFFECTS FROM AVAILABLE INFORMATION. EYE CONTACT:

LIQUID, VAPORS OR MIST MAY CAUSE DISCOMFORT IN THE EYE WITH PERSISTENT CONJUNCTIVITIS, SEEN AS SLIGHT EXCESS REDNESS OR CONJUNCTIVA. SERIOUS CORNEAL INJURY IS NOT ANTICIPATED.

INGESTION:

MAY CAUSE ABDOMINAL DISCOMFORT OR PAIN, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, MALAISE, BLURRING OF VISION, IRRITABILITY, BACK PAIN, DECREASE IN URINE OUTPUT, KIDNEY FAILURE, AND CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING IRREGULAR EYE MOVEMENTS, CONVULSIONS AND COMA. CARDIAC FAILURE AND PULMONARY EDEMA MAY DEVELOP. SEVERE KIDNEY DAMAGE WHICH MAY BE FATAL MAY FOLLOW THE SWALLOWING OF ETHYLENE GLYCOL. A FEW REPORTS HAVE BEEN PUBLISHED DESCRIBING THE DEVELOPMENT OF WEAKNESS OF THE FACIAL MUSCLES, DIMINISHING HEARING, AND DIFFICULTY WITH SWALLOWING, DURING THE LATE STAGES OF SEVERE POISONING.

CHRONIC EFFECTS:

PROLONGED OR REPEATED INHALATION EXPOSURE MAY PRODUCE SIGNS OF CENTRAL NERVOUS SYSTEM INVOLVEMENT, PARTICULARLY DIZZINESS AND JERKING EYE MOVEMENTS. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE SKIN SENSITIZATION AND AN ASSOCIATED DERMATITIS IN SOME INDIVIDUALS. ETHYLENE GLYCOL HAS BEEN FOUND TO CAUSE BIRTH DEFECTS IN LABORATORY ANIMALS. THE SIGNIFICANCE OF THIS FINDING TO HUMANS HAS NOT BEEN DETERMINED. 2-ETHYL HEXANOIC ACID, SODIUM SALT IS SUSPECTED OF CAUSING DEVELOPMENTAL EFFECTS BASED ON ANIMAL DATA.

CARCINOGENICITY LISTING:

NONE OF THE COMPONENTS OF THESE PRODUCTS IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN BY IARC, NTP, ACGIH OR OSHA.

ACUTE TOXICITY VALUES:

ETHYLENE GLYCOL:

LD50 ORAL RAT: 4700 MG/KG LD50 SKIN RABBIT: 9530 MG/KG DIETHYLENE GLYCOL:

LD50 ORAL RAT: 12,565 MG/KG LD50 SKIN RABBIT: 11,890 MG/KG

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH: ETHYLENE GLYCOL HAS BEEN SHOWN TO PRODUCE DOSE-RELATED TERATOGENIC EFFECTS IN RATS AND MICE WHEN GIVEN BY GAVAGE OR IN DRINKING WATER AT HIGH CONCENTRATIONS OR DOSES. ALSO, IN A PRELIMINARY STUDY TO ASSESS THE EFFECTS OF EXPOSURE OF PREGNANT RATS AND MICE TO AEROSOLS AT CONCENTRATIONS 150, 1,000 AND 2,500 MG/M3 FOR 6 HOURS A DAY THROUGHOUT THE PERIOD OF ORGANOGENESIS, TERATOGENIC EFFECTS WERE PRODUCED AT THE HIGHEST CONCENTRATIONS, BUT ONLY IN MICE. THE CONDITIONS OF THESE LATTER EXPERIMENTS DID NOT ALLOW A CONCLUSION AS TO WHETHER THE DEVELOPMENTAL TOXICITY WAS MEDIATED BY INHALATION OF AEROSOL, PERCUTANEOUS ABSORPTION OF ETHYLENE GLYCOL FROM CONTAMINATED SKIN, OR SWALLOWING OF ETHYLENE GLYCOL AS A RESULT OF GROOMING THE WETTED COAT. IN A FURTHER STUDY, COMPARING EFFECTS FROM HIGH AEROSOL CONCENTRATION BY WHOLE-BODY OR NOSE-ONLY EXPOSURE, IT WAS SHOWN THAT NOSE-ONLY EXPOSURE RESULTED IN MATERNAL TOXICITY (1,000 AND 2,500 MG/M3) AND DEVELOPMENTAL TOXICITY IN WITH MINIMAL EVIDENCE OF TERATOGENICITY (2,500 MG/M3). THE NO-EFFECTS CONCENTRATION (BASED ON MATERNAL TOXICITY) WAS 500 MG/M3. IN A FURTHER STUDY IN MICE, NO TERATOGENIC EFFECTS COULD BE PRODUCED WHEN ETHYLENE GLYCOL WAS APPLIED TO THE SKIN OF PREGNANT MICE OVER THE PERIOD OF ORGANOGENESIS. THE ABOVE OBSERVATIONS SUGGEST THAT ETHYLENE GLYCOL IS TO BE REGARDED AS AN ANIMAL TERATOGEN; THERE IS CURRENTLY NO AVAILABLE INFORMATION TO SUGGEST THAT ETHYLENE GLYCOL CAUSED BIRTH DEFECTS IN HUMANS. CUTANEOUS APPLICATION OF ETHYLENE GLYCOL IS INEFFECTIVE IN PRODUCING DEVELOPMENTAL TOXICITY; EXPOSURE TO HIGH AEROSOL CONCENTRATION IS ONLY MINIMALLY EFFECTIVE IN PRODUCING DEVELOPMENTAL TOXICITY; THE MAJOR ROUTE FOR PRODUCING DEVELOPMENTAL TOXICITY IS PERORALLY.

TWO CHRONIC FEEDING STUDIES, USING RATS AND MICE, HAVE NOT PRODUCED ANY EVIDENCE THAT ETHYLENE GLYCOL CAUSES DOSE-RELATED INCREASES IN TUMOR INCIDENCE OR A DIFFERENT PATTERN OF TUMORS COMPARED WITH UNTREATED CONTROLS. THE ABSENCE OF CARCINOGENIC POTENTIAL FOR ETHYLENE GLYCOL HAS BEEN SUPPORTED BY NUMEROUS INVITRO GENOTOXICITY STUDIES SHOWING THAT IT DOES NOT PRODUCE MUTAGENIC OR CLASTOGENIC EFFECTS. THIS PRODUCT CONTAINS LESS THAN 0.3% TOLYTRIAZOLE WHICH HAS DEMONSTRATES MUTAGENIC ACTIVITY IN A BACTERIAL TEST SYSTEM. A CORRELATION HAS BEEN ESTABLISHED BETWEEN MUTAGENIC ACTIVITY AND CARCINOGENIC ACTIVITY FOR MANY CHEMICALS. TOLYTRIAZOLE HAS NOT BEEN IDENTIFIED AS A CARCINOGEN OR PROBABLE CARCINOGEN BY NTP, IARC OR OSHA.

IN A STUDY OF WISTAR RATS, ADVERSE DEVELOPMENTAL RESULTS WERE REPORTED AT A DOSE OF 100 MG / KG OF BODY WEIGHT FOR 2-ETHYL HEXANOIC ACID, SODIUM SALT.

12. ECOLOGICAL INFORMATION 🛆 top

ECOTOXICITY:

ETHYLENE GLYCOL:

LC50 FATHEAD MINNOW: <10,000 MG/L/96 HR.

EC50 DAPHNIA MAGNA: 100,000 MG/L/48 HR.

BACTERIAL (PSEUDOMONAS PUTIDA): 10,000 MG/L

PROTOZOA (ENTOSIPHON SULCATUM AND URONEMA PARDUCZI; CHATTON-LWOFF):

>10,000 MG/L

ALGAE (MICROCYSTIS AERUGINOSA): 2,000 MG/L

GREEN ALGAE (SCENEDESMUS QUANDRICAUDA): >10,000 MG/L

DIETHYLENE GLYCOL:

LC50 WESTERN MOSQUITOFISH: >32,000 MG/L/96 HR.

PERSISTENCE AND DEGRADABILITY:

ETHYLENE GLYCOL IS READILY BIODEGRADABLE (97-100% IN 2-12 DAYS). DIETHYLENE

GLYCOL IS READILY BIODEGRADABLE (>70% IN 19DAYS).

BIOACCUMULATIVE POTENTIAL:

ETHYLENE GLYCOL:

A BCF OF 10, REPORTED FOR ETHYLENE GLYCOL IN FISH, GOLDEN IDE (LEUCISCUS IDUS MELANOTUS), AFTER 3 DAYS OF EXPOSURE SUGGESTS THE POTENTIAL FOR BIO CONCENTRATION IN AQUATIC ORGANISMS IS LOW.

DIETHYLENE GLYCOL:

AN ESTIMATED BCF OF 3 SUGGESTS THE POTENTIAL FOR BIO CONCENTRATION IN AQUATIC ORGANISMS IS LOW.

MOBILITY IN SOIL:

ETHYLENE GLYCOL AND DIETHYLENE GLYCOL ARE HIGHLY MOBILE IN SOIL.

OTHER ADVERSE EFFECTS: NONE KNOWN

13. DISPOSAL CONSIDERATIONS 🔬 top

DISPOSE OF PRODUCT IN ACCORDANCE WITH ALL LOCAL, STATE/PROVINCIAL AND FEDERAL REGULATIONS.

14. TRANSPORT INFORMATION 🛕 top

U.S. DOT HAZARD CLASSIFICATION:

NOT REGULATED (UNLESS PACKAGE CONTAINS A REPORTABLE QUANTITY) NOTE:

IF A SHIPMENT OF A REPORTABLE QUANTITY (5,260 LBS/553 GAL.) IN A SINGLE PACKAGE IS INVOLVED, THE FOLLOWING INFORMATION APPLIES:

PROPER SHIPPING NAME:

RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYLENE GLYCOL)

UN NUMBER: UN3082 PACKING GROUP: III LABELS REQUIRED:

CLASS: 9

DOT MARINE POLLUTANTS:

THIS PRODUCT DOES NOT CONTAIN MARINE POLLUTANTS AS DEFINED IN 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: NOT REGULATED

CANADIAN TDG CLASSIFICATION: NOT REGULATED

15. REGULATORY INFORMATION A top

EPA SARA 311/312 HAZARD CLASSIFICATION: ACUTE HEALTH, CHRONIC HEALTH EPA SARA 313:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO ANNUAL RELEASE REPORTING REQUIREMENTS UNDER SARA TITLE III, SECTION 313 (40 CFR 372): ETHYLENE GLYCOL 107-21-1 75-95%

PROTECTION OF STRATOSPHERIC OZONE:

THIS PRODUCT IS NOT KNOWN TO CONTAIN OR TO HAVE BEEN MANUFACTURED WITH OZONE DEPLETING SUBSTANCES AS DEFINED IN 40 CFR PART 82, APPENDIX A TO SUBPART A.

CERCLA SECTION 103:

SPILLS OF THIS PRODUCT OVER THE RQ (REPORTABLE QUANTITY) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER. THE RQ FOR THIS PRODUCT, BASED ON THE RQ FOR ETHYLENE GLYCOL (95% MAXIMUM) OF 5,000 LBS, IS 5,260 LBS. MANY STATES HAVE MORE STRINGENT RELEASE REPORTING REQUIREMENTS. REPORT SPILLS REQUIRED UNDER FEDERAL, STATE AND LOCAL REGULATIONS.

CALIFORNIA PROPOSITION 65:

THE NORMAL CONSUMER USE OF THIS PRODUCT DOES NOT RESULT IN EXPOSURES TO CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR REPRODUCTIVE HARM ABOVE THE SIGNIFICANT RISK LEVEL FOR CARCINOGENS OR THE MAXIMUM ALLOWABLE DOSE LEVELS FOR REPRODUCTIVE TOXINS. THEREFORE, NO WARNINGS ARE REQUIRED FOR CONSUMER PACKAGES. INDUSTRIAL OR OTHER OCCUPATIONAL USE OF THIS PRODUCT AT HIGHER FREQUENCY AND USING LARGER QUANTITIES OF THIS PRODUCT MAY RESULT IN EXPOSURES EXCEEDING THESE LEVELS

AND ARE LABELED ACCORDINGLY.

EPA TSCA INVENTORY:

ALL OF THE COMPONENTS OF THIS MATERIAL ARE LISTED ON THE TOXIC SUBSTANCES CONTROL ACT (TSCA) CHEMICAL SUBSTANCES INVENTORY.

CANADIAN ENVIRONMENTAL PROTECTION ACT:

ALL OF THE INGREDIENTS ARE LISTED ON THE CANADIAN DOMESTIC SUBSTANCES LIST. CANADIAN WHMIS CLASSIFICATION:

CLASS D - DIVISION 2 - SUBDIVISION A - (A VERY TOXIC MATERIAL CAUSING OTHER TOXIC EFFECTS)

CANADIAN WHMIS HAZARD SYMBOLS:

D2 - MATERIALS CAUSING OTHER TOXIC EFFECTS

THIS SDS HAS BEEN PREPARED ACCORDING TO THE CRITERIA OF THE CONTROLLED PRODUCTS REGULATION (CPR) AND THE SDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): ALL OF THE INGREDIENTS ARE LISTED ON THE EINECS INVENTORY.

ALL OF THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE JAPANESE EXISTING AND NEW CHEMICAL SUBSTANCES (MITI) LIST.

AUSTRALIA:

ALL OF THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES.

KOREA

ALL OF THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE KOREAN EXISTING CHEMICAL LIST (KECL).

PHILIPPINES:

ALL OF THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE PHILIPPINE INVENTORY OF CHEMICAL AND CHEMICAL SUBSTANCE (PICCS)

ALL OF THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE INVENTORY OF EXISTING CHEMICAL SUBSTANCE IN CHINA (IECSC).

16. OTHER INFORMATION A top

NFPA RATING (NFPA 704):

2

FIRE

HEALTH

INSTABILITY 0

REVISION SUMMARY:

ALL SECTIONS - SECTION 1: ADDITION OF FORMULA AND PRODUCT NUMBERS. SECTION 9: CHANGES TO PHYSICAL DATA RANGES.

SDS DATE OF PREPARATION/REVISION: APRIL 16, 2016

THIS SDS IS DIRECTED TO PROFESSIONAL USERS AND BULK HANDLERS OF THE PRODUCT. CONSUMER PRODUCTS ARE LABELED IN ACCORDANCE WITH FEDERAL HAZARDOUS SUBSTANCES ACT REGULATIONS.

WHILE PRESTONE PRODUCTS CORPORATION BELIEVES THAT THE DATA CONTAINED HEREIN ARE FACTUAL AND THE OPINIONS EXPRESSED ARE THOSE OF QUALIFIED EXPERTS REGARDING THE RESULTS OF THE TESTS CONDUCTED, THE DATA ARE NOT TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH PRESTONE PRODUCTS CORPORATION ASSUMES LEGAL RESPONSIBILITY. THEY ARE OFFERED SOLELY FOR YOUR CONSIDERATION, INVESTIGATION AND VERIFICATION. ANY USE OF THESE DATA AND INFORMATION MUST BE DETERMINED BY THE USER TO BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

IF MORE INFORMATION IS NEEDED, PLEASE CONTACT:

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