

State of West Virginia
Buyer: John Estep
Solicitation No. DOT 2300000108
Calcium Magnesium Acetate and a Pre-Wetting Agent
Opens April 12, 2023 @ 13:30 Eastern



Vendor:
Nachurs Alpine Solutions, LLC
421 Leader St.
Marion, OH 43302



ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFO DOT2300000108

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Machurs Alpine Solutions, LLC
Company


Authorized Signature

Apr. 4, 2023
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.



421 Leader Street • Marion, Ohio 43302
[P] 800.622.4877 [F] 740.223.3874

www.nasi-tm.com
twitter.com/NASIndustrial

John Estep, Buyer
Purchasing Division
2019 Washington St. East
Charleston, WV 25305-0130

RE: CRFQ Solicitation No. DOT 2300000108
Calcium Magnesium Acetate & Low Corrosive Pre-wetting Agent

April 12, 2023

Dear Mr. Estep,

Thank you for this opportunity to bid our deicing products for the New River Gorge Bridge.

We are proposing the incumbent product, our NASi SF, solid sodium formate to use as "CMA" (Item 1), as an equal (or better) to the required specifications. More information is included as required per Section 3.4, Under Specification, to include our specifications, industry literature, and a comparative table demonstrating the equality (or better) of CMA.

Notable points for mention include:

- **WV DOT has used this product successfully since last 2018. Michael Harper, APD Supervisor, said that it lays down better than the round pellets and with it, we don't really need to pre-wet it with the liquid.**
- NASi SF density is slightly higher than CMA, and with the irregular shaped granule, likelihood of blowing in the wind is reduced. CMA is, on average 44.95 lb/cu.ft. SF is, on average, 62.4 lbs/cu.ft. That's 32% heavier.
- The effective freeze temperature of NASi SF is significantly lower than CMA.
- SF has been used on Pena Blvd at Denver airport.
- SF has been used on roadways surrounding Dulles airport.
- SF has been used at Denison Parking in Indianapolis.
- Some states have banned the use of products containing magnesium, i.e., it is not allowed in Illinois and there is a moratorium on its usage. As well, Illinois does not recommend CMA on concrete as an alternate product to sodium chloride. <http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Research/Pavement-Technology-Advisories/Design-Construction-and-Materials-SeriesNew-Folder/PTAD8.pdf>

We are also bidding our Alpine Ice Melt, 50% potassium acetate liquid pre-wetting agent (Item 2) as per the exact specifications in the RFQ.

Nachurs Alpine Solutions, LLC is a leading North American manufacturer of specialty runway and transportation-related deicers. Our 6 plants produce deicer products. Overlaying our plant footprint is an extensive transcontinental rail, terminal, and trucking network to ensure prompt 24/7 customer service and quick deliveries.

Best regards,

Sales Manager
Cell phone: 312-316-0866
Email: Kengelbrecht@NASI-TM.com

REFERENCE LIST OF CURRENT NASI-SF USERS
confidential

Michael Harper, APD Supervisor
3121 Main St.
Oak Hill, WV 2590
304-663-7035

Tim Bolinger
Denison Parking
Indianapolis, IN 46204
317-638-5840
TBolinger@denisonparking.com

Chris Pasquini, Asst. Maintenance Mgr., Ph. (518) 242-2379
Email: cpasquini@albanyairport.com
Albany International
737 Albany Shaker Road
Albany, NY 12211

Jay Ball, Director of Facilities & Grounds, Ph. (540) 362-1999, ext. 277
Email: JayB@flyroa.com
Roanoke Regional Airport Commission
5202 Aviation Drive
Roanoke, VA 24012

Irene Seyler, Ph. (814) 833-5258
Email: iseyler@erieairport.org
Erie International Airport
Tom Ridge Field
4411 West 12th Street
Erie, PA 16505-0393

Through our distributor Schoenberg Salt
DHL & Amazon, Cincinnati, OH
Mid-America St. Louis Airport
AeroSnow (Services JFK & other Airports)

The following uses IceShield (a CMA-containing coated salt product) deicer for DOT – type accounts.
Earl Hudson Ph (757) 385-2069
City of Virginia Beach
Parks & Recreation
4141 Dam Neck Rd.
Virginia Beach, VA 23456



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Centralized Request for Quote
 Chemicals

Proc Folder: 1174455			Reason for Modification:
Doc Description: Calcium Magnesium Acetate & Low Corrosive Pre-Wetting Agent			
Proc Type: Central Master Agreement			
Date Issued	Solicitation Closes	Solicitation No	Version
2023-03-27	2023-04-12 13:30	CRFQ 0803 DOT2300000108	1

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code: VC0000088375
 Vendor Name : Nachurs Alpine Solutions, LLC
 Address : 421 Leader St.
 Street :
 City : Marion
 State : Ohio Country : USA Zip : 43302
 Principal Contact : Karen Engelbrecht
 Vendor Contact Phone: 312-316-0866 Extension:

FOR INFORMATION CONTACT THE BUYER
 John W Estep
 304-558-2566
 john.w.estep@wv.gov

Vendor Signature X  FEIN# 81-4843176 DATE March 30, 2023

All offers subject to all terms and conditions contained in this solicitation
 John Grega, Chief Financial Officer

ADDITIONAL INFORMATION**REQUEST FOR QUOTATION:**

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways to establish an open-end contract for Calcium Magnesium Acetate and Low Corrosive Pre-Wetting Agent for use by the WVDOH on the New River Gorge Bridge. Per the Bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO		SHIP TO	
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER		VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER	
No City US	WV	No City US	WV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Calcium Magnesium Acetate	0.00000	TON		

Comm Code	Manufacturer	Specification	Model #
46161506	Nachurs Alpine Solutions, LLC	Nasi-SF, sodium formate solid granules	

Extended Description:

SEE ATTACHED PRICING PAGE - ATTACHMENT A, FOR ACTUAL COST

INVOICE TO		SHIP TO	
VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER		VARIOUS AGENCY LOCATIONS AS INDICATED BY ORDER	
No City US	WV	No City US	WV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Pre-Wetting Agent, No-Chlorides	0.00000	GL		

Comm Code	Manufacturer	Specification	Model #
46161506	Nachurs Alpine Solutions, LLC	Alpine Ice Melt, 50% potassium acetate liquid	

Extended Description:

SEE ATTACHED PRICING PAGE - ATTACHMENT A, FOR ACTUAL COST

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Tech Questions due by 10:00am	2023-04-03

	Document Phase	Document Description	Page
DOT2300000108	Final	Calcium Magnesium Acetate & Low Corrosive Pre-Wetting Agent	3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Calcium Magnesium Acetate with Low Corrosive Pre-Wetting Agent
ATTACHMENT A PRICING PAGE (ATT A)

Vendors Name: Nachurs Alpine Solutions, LLC

VENDOR INSTRUCTIONS: Vendor shall provide their bid prices below for the Contract Items for which they are bidding. Vendors may bid any or all Contract Items. Contract(s) shall be awarded to the lowest bidding Vendor, per Contract Item. Vendor shall factor delivery expenses into their bid price. Delivery shall be F.O.B. destination to the following address:

WVDOH District 9, Fayette County Headquarters
 3121 East Main Street
 Oak Hill, WV 25901

Contract Item	Description	Estimated Qty*	Unit of Measure	Cost Per Unit of Measure
1	Calcium Magnesium Acetate	100	Tons	\$2,020.00
2	Pre-Wetting Agent, No-Chlorides	1000	Gallons	\$11.27

NOTE: Quote for "TONS" is standard ton = 2000 lbs per ton. Liquid is sold in 275 gallon totes.

*Quantities listed on these Pricing Pages, ATT A, are approximations only. It is understood and agreed that the contract shall cover the quantities actually ordered for delivery during the term of the contract, whether more or less than the quantities shown.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

Term Contract

Initial Contract Term: The Initial Contract Term will be for a period of One (1) year. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to Three (3) successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Alternate Renewal Term – This contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____ days.

Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

the contract will continue for _____ years;

the contract may be renewed for _____ successive _____ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

One-Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

Construction/Project Oversight: This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as _____), and continues until the project for which the vendor is providing oversight is complete.

Other: Contract Term specified in _____

4. AUTHORITY TO PROCEED: Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

Open End Contract: Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.

Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

One-Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

Construction: This Contract is for construction activity more fully defined in the specifications.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

Commercial General Liability Insurance in at least an amount of: 1,000,0000.00 per occurrence.

Automobile Liability Insurance in at least an amount of: _____ per occurrence.

Professional/Malpractice/Errors and Omission Insurance in at least an amount of: _____ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

Commercial Crime and Third Party Fidelity Insurance in an amount of: _____ per occurrence.

Cyber Liability Insurance in an amount of: _____ per occurrence.

Builders Risk Insurance in an amount equal to 100% of the amount of the Contract.

Pollution Insurance in an amount of: _____ per occurrence.

Aircraft Liability in an amount of: _____ per occurrence.

9. WORKERS' COMPENSATION INSURANCE: Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. VENUE: All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

11. LIQUIDATED DAMAGES: This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

_____ for _____.

Liquidated Damages Contained in the Specifications.

Liquidated Damages Are Not Included in this Contract.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

14. PAYMENT IN ARREARS: Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

20. TIME: Time is of the essence regarding all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE WITH LAWS: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

34. VENDOR NON-CONFLICT: Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

Revised 11/1/2022

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

37. NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

38. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

39. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.division@wv.gov.

40. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
 1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
 2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

44. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

45. VOID CONTRACT CLAUSES: This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

46. ISRAEL BOYCOTT: Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Karen Engelbrecht, Sales
(Address) 421 Leader St., Marion, Ohio 43302
(Phone Number) / (Fax Number) 312-316-0866 / 740-223-3874
(Email address) KEngelbrecht@NASI-tm.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Nachurs Alpine Solutions, LLC

(Company) _____

x (Signature of Authorized Representative) 

John Grega, Chief Financial Officer, March 30, 2023

(Printed Name and Title of Authorized Representative) (Date)

800-622-4877 x226 740-223-3874

(Phone Number) (Fax Number)

jgrega@nachurs-alpine.com

(Email Address)

REQUEST FOR QUOTATION
Calcium Magnesium Acetate and Low Corrosive Pre-Wetting Agent

SPECIFICATIONS

- 1. PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Division of Highways to establish an open-end contract for Calcium Magnesium Acetate and Low Corrosive Pre-Wetting Agent for use by the WVDOH on the New River Gorge Bridge.

- 2. DEFINITIONS:** The terms listed below shall have the following meanings assigned to them throughout and for the purpose of this Solicitation. Additional definitions can be found in Section 2 of the General Terms and Conditions.
 - 2.1 “ADO” and “Agency Delivery Order”** - A written order entered by WVDOH personnel in the wvOASIS financial system against a master agreement, authorizing quantities of commodities and/or services to be delivered in accordance with all terms, conditions, and prices stipulated in the original contract.

 - 2.2 “CMA”** - Calcium Magnesium Acetate.

 - 2.3 “cP” or “Centipoise”** - The unit of measure for dynamic viscosity

 - 2.4 “Contract Item(s)”** - The list of items available for Vendor to provide pricing as identified in Section 3.2 of this Solicitation and referenced throughout.

 - 2.5 “Contractor” or “Vendor”** - Interchangeably used throughout this Solicitation and in any cited Sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, adopted latest Standard Specs edition, as amended, including any Supplementals and refers to any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract, as context requires.

 - 2.6 “Emergency Work”** – Work or orders requiring to be done without delay owing to circumstances for which the WVDOH could not have reasonably expected and has been designated as such by a representative of the WVDOH.

 - 2.7 “FOB” or “Free on Board”** - Indicates that the price for goods includes delivery at the Vendor’s expense to a specified point, and that the Vendor retains liability for loss or damage until the goods are delivered.

 - 2.8 “Liquidated Damages”** - Monetary compensation due from the Vendor in the event the Vendor’s performance falls short of contractual stipulation or breaches the contract. Delays in the delivery of goods and/or services or quality failures or corrections by the Vendor may result in the Agency assessing charges for such deficiencies per these contract Specifications, the Standard Specs Section 108.7, as

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amended, and calculated from the table posted in Section 6.2.1 of these Specifications.

- 2.9 **“Pricing Pages,” “Attachment A,” and “ATT A”** - The schedule of prices attached hereto as Attachment A (ATT A) and used to evaluate Solicitation responses.
- 2.10 **“Solicitation”** - The official notice of an opportunity to supply the State with goods or services.
- 2.11 **“Standard Specs”** - Used throughout this solicitation means the West Virginia Department of Transportation, Division of Highways Standard Specifications, Roads and Bridges, most recent edition, as modified or amended by all subsequent Supplemental Specifications.
- 2.12 **“WVDOH” or “Agency”** - Interchangeable terms for the West Virginia Division of Highways.

3. GENERAL REQUIREMENTS:

- 3.1 **Standard Specifications Roads and Bridges:** The following Standard Specs Sections shall apply, as applicable, to the administration of this contract: 101, 102, 103, 104, 105, 106, 107, 108, 109, and 110, as amended.

An electronic copy of the Standard Specs and Supplementals may be obtained at: <https://transportation.wv.gov/highways/TechnicalSupport/specifications/Pages/default.aspx>. Hard copies of these publications may be purchased from Technical Support Division, by completing the Specification Order Form provided within the website.

- 3.2 **Contract Items and Mandatory Requirements:** Vendor shall provide Agency with the Contract Items listed below on an open-end and continuing basis. Contract Items must meet or exceed the mandatory requirements as shown below.

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Calcium Magnesium Acetate and Low Corrosive Pre-Wetting Agent

3.2.1 Calcium Magnesium Acetate (CMA) shall conform to the following product specifications and shall be delivered in bulk.

Composition: A nominal (3:7 Ca to Mg molar ratio) CMA of this analysis:

CMA	91% Minimum
Water (Free and Hydration)	5% Maximum
Water-Insoluble Material	4% Maximum

Particle Size:	Sieve 4 90% Minimum
	Sieve 14 10% Maximum
Particle Shape:	Hard, Angular, Asymmetrical Granules
Specific Gravity:	Minimum 1.2
Bulk Density:	40 lb/ft³ to 44 lb/ft³
Residual Base:	Maximum 0.4 meg base/gm sample
Product pH:	pH 8 to 10 in a 10% solution

3.2.2 Low Corrosive Pre-Wetting Agent/No Chlorides

Density:	At 68°F. 10.7 lbs/gallon
Viscosity:	At 68°F. 10 cP Maximum
	At 32°F. 20 cP Maximum
Freezing Point:	-76°F
Typical pH:	11.0+/-0.5
Specific Gravity:	At 68°F. 1.25-1.30
Container Size:	265-gallon tote

3.2.3 The vendor shall provide bid product labeling or documentation with their bid for each item. WVDOH will evaluate each item based on the equivalency of the bid product to determine if the bid product meets the required specifications. The WVDOH will have the sole authority to determine whether the proposed product is equal to or equivalent to the stated product.

3.3 Sampling and Testing: The Vendor shall provide the WVDOH with the proposed source of supply and typical properties of products to include quality and gradation, as well as the Material Safety Data Sheet (MSDS) for each product prior to award. The WVDOH may conduct sampling and testing to verify material quality or gradation. The vendor must supply WVDOH with samples of products upon request.

3.4 Emergency Request: Emergency request as ordered by WVDOH District Engineer, or their designee are requests that shall be initiated within 48 hours from

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when the request is received by the vendor. The determination of emergency work will be in accordance with Section 2.6 of this Solicitation and prominently noted on the ADO. Designated emergency requests will be paid at 1.50 times the vendors bid price.

4. CONTRACT AWARD:

- 4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price on all Contract Items. A contract will be awarded to the Vendor that provides the lowest unit cost, per ton, for **Contract Item 1** and to the Vendor that provides the lowest unit cost, per gallon, for **Contract Item 2**, which could result in multiple vendors being awarded with a contract.
- 4.2 Pricing Pages, Attachment A (ATT A):** Vendor should complete the Pricing Pages by providing a bid price on each item they choose to bid. Vendors may bid any or all contract items on the Pricing Pages. Vendor should complete the Pricing Pages in their entirety as failure to do so may result in Vendor's bids being disqualified. All bids or pricing submitted shall be held and honored by the Vendor for 90 days after the bid opening date.
- 4.2.1** The Pricing Pages contain a list of Contract Items and estimated purchase volumes. The estimated purchase volume for each item represents the approximate volume of anticipated purchases only. No future use of the Contract or any individual item is guaranteed or implied.
- 4.2.2** Vendor should type or electronically enter the information into the Pricing Pages spreadsheet to prevent errors in the evaluation. In most cases, the Pricing Pages are available in wvOASIS within the solicitation attachments, however, Vendors may request an electronic copy of the Pricing Pages spreadsheet for bid purposes by sending an email request to the following address: John.W.Estep@wv.gov
- 4.2.3** Changing a column or row description, Contract Item description, unit of measure, or estimated quantities on the **Pricing Pages, Attachment A (ATT A)**, shall result in the disqualification of Contract Item bid on the altered line. In circumstances where all Contract Items must be bid for bid evaluation and contract award, the disqualification of any Contract Item will result in the disqualification of the entire bid.

Submitting Pricing Pages other than those provided with this solicitation, as described in Section 4.2, shall result in the disqualification Vendor's bid in its entirety.

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Vendor entries of bid prices or other notations made in wvOASIS commodity line descriptions will not be considered for bid evaluation or award.

- 4.3 Contract Award Transition:** Upon award of this contract, the WVDOH Operations Division will announce the effective date of use of this contract to the Districts and the Vendors, whether it is by the effective date, the completed and encumbered date, or an established date by the WVDOH. Upon the announced effective date of use, any order issued prior to the award of the contract shall remain in effect and should not be cancelled until that order is filled; however, after 10 working days of the District and Vendors notice, any order that has not been completely filled by the Vendors shall NOT be completed and a cancellation notice will be sent to that Vendor from the issuing District for cancellation of the balance of that order only. No orders from prior contracts should be held open by the District or Vendors longer than 10 working days after the effective date of use is announced for the new contract.
- 4.4 RENEWAL PRICE ADJUSTMENTS:** A price adjustment will occur at the time of the Contract's renewal, and only if all parties agree to renew the contract for an additional year period under the same terms, conditions, and specifications.
- 4.4.1** All Contract Items will be adjusted proportionally, upwards, or downwards, based on the percentage change from January 2023 to the most recent index rate available at the time of renewal submission on the Producer Price Index by Commodity: Nonmetallic Mineral Products: Nonmetallic Minerals and Products, Not Elsewhere Classified index at <https://fred.stlouisfed.org/series/WPS1399>. If for any reason the index is no longer available at the time of the renewal, an equivalent Nonmetallic Minerals and Products index will be used.

EXAMPLE OF ADJUSTMENT:

- The January 2021 index rate was 249.900
- The January 2022 index rate was 259.472
- Contract Item 1 bid price was \$1800/ton (example only)

A 3.83% change in the Nonmetallic Minerals and Products index occurred between January 2021 and January 2022. Contract Item 1 will be adjusted proportionally to match the percentage change in the index – therefore would be increased by 3.83%. The contract price for this Contract Item during the renewal period would be adjusted from \$1800.00 per ton to \$1868.94 per ton for the remainder of the renewal contract. The same calculation would be performed for all Contract Items proportionally.

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4.4.2 The Price adjustments and renewal will be granted or denied at the sole and absolute discretion of the State.

4.4.3 Price adjustments shall be memorialized by a written Change Order which must be reviewed and approved by the WVDOT Budget and Procurement Division to be effective. Adjusted pricing will not take effect until the effective date of such Change Order and cannot be retroactive.

5. ORDERING AND PAYMENT:

5.1 Ordering: Vendor shall accept orders through regular mail, facsimile, email, or any other written forms of communication. Vendor shall maintain and keep current its phone numbers, fax number, email address, locations, and ordering/billing/payment addresses with WVDOH and in wvOASIS. Vendor may, but is not required to, accept online orders through a secure internet ordering portal/website. If Vendor can accept online orders, it shall include in its response a brief description of how Agencies may utilize the online ordering system. Vendor shall ensure that its online ordering system is properly secured prior to processing Agency orders online.

5.2 Agency Delivery Order (“ADO”): District personnel must issue an Agency Delivery Order (ADO) from OASIS for specific quantities of materials based on each project’s requirements and detailing the need and location information of work to be completed per Contract Items, as well as the start and end dates, which will become the agreed upon official start and end dates. The ADO must be created in OASIS and approved to “Final”, prior to placing the order with the vendor. The District is responsible for creating the ADO in OASIS and is required to submit the approved order, in writing, directly to the vendor via mail, email or fax. **Verbal communication with the vendor is not considered an official order.** In the event the vendor denies an order or if there are changes to an ADO, the District must process a change order to the approved ADO issued from OASIS.

Emergencies shall be prominently noted on the ADO. Once complete, the ADO shall be sent to Vendor via fax, email, or mail.

5.3 Payment: Upon completion of the work indicated on the ADO, Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, as well as Electronic Funds Transfer as methods to process payment for goods and services. The Vendor shall accept the State of West Virginia’s Purchasing Card and Electronic Funds Transfer for payment of orders under this Contract. Electronic Funds Transfer for payment is available through the WV State Auditor’s Office. The Vendor may visit the WV

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State Auditor's website (wvsao.gov) for all necessary forms and instructions. Payment method may be dictated at WVDOH's discretion.

6. PROJECT ACCEPTANCE, DELIVERY AND RETURN:

- 6.1 Project Acceptance and Written Verification of Receipt:** Upon receipt of a WVDOH ADO, the Vendor shall advise the WVDOH in writing within five calendar days of their acceptance or refusal of the ADO. As verification of receipt, Vendor must provide written acknowledgement of any ADO and any Revisions/Modifications thereto sent by WVDOH. Failure to provide the WVDOH with written acknowledgement of any ADO/Revisions within five days of the order being sent shall be considered refusal of the ADO. In the event of refusal, the WVDOH at its own discretion shall cancel the ADO and may seek to obtain the goods or services from the next low bid Vendor or proceed with an emergency purchase from the open market.
- 6.2 Delivery Time:** Standard orders must be delivered within 10 working days of receipt, or by an acceptable delivery date agreed upon at the time of order. After receiving orders, the vendor must deliver emergency orders within an acceptable time frame agreed upon by the WVDOH and the vendor. The Vendor shall ship all orders in accordance with the above schedule and shall not hold orders until a minimum delivery quantity is met.
- 6.3 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if orders will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the delayed order or proceed with an Emergency Purchase from the open market.

The Agency placing the ADO under this Contract must be notified in writing by the Vendor no later than five business days prior to the scheduled start date from the Agency's order. Any failure to notify, acknowledge receipt of WVDOH's written ADO's/ Revisions resulting in delivery delay, or failure to start or complete the project per the WVDOH scheduled due dates may be determined by the WVDOH at its sole discretion as harmful to the Agency and as such, may result in WVDOH's cancellation of the ADO and application of Liquidated Damages.

Any Agency seeking to obtain items from the open market under this provision must first obtain approval of the West Virginia Purchasing Division.

- 6.3.1 Liquidated Damages:** If the Vendor's work completion or corrections of deficient work exceeds the ADO completion due date or timeframe, the Vendor shall agree that no extension of contract time will be granted

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unless Liquidated Damages are applied by the WVDOH in the form of an off-set reduction to the total amount of the Vendor's final invoice. The WVDOH shall calculate Liquidated Damages per project beginning on day one (1) after the WVDOH's specified ADO due date and in accordance with this Section, the Contract's Terms and Conditions, Standard Specs Section 108.7, and the following Standard Specs Section Table 108.7.1 - Schedule of Liquidated Damages, as amended:

Table 108.7.1
Schedule of Liquidated Damages

Original Contract Amount		Daily Charges Per Calendar Day
For More Than	To and Including	
\$0	\$500,000	\$300
\$500,000	\$2,000,000	\$600
\$2,000,000	\$10,000,000	\$1,500
\$10,000,000	\$25,000,000	\$3,000
\$25,000,000		\$4,000

6.3.2 Force Majeure: It shall be further noted that the Vendor is not responsible for and shall not be penalized for delays in its delivery when caused by factors or events outside Vendor's control, including but not limited to acts or omissions of the Agency or third parties, acts of civil or military authority, civil disturbance, war, terrorism, pandemics, explosions, fire, floods, tornadoes, or other natural disasters or acts of God.

6.4 Delivery Payment/Risk of Loss: Standard order delivery shall be F.O.B. destination to the Agency's location. Vendor shall include the cost/discount of standard order delivery charges in its bid pricing and is not permitted to charge the Agency separately for such delivery. The Agency will pay delivery charges on all emergency orders provided that the Vendor invoices those delivery costs as a separate charge with the original freight bill attached to the invoice.

Deliveries made by the vendor shall be comprised only of Contract Items intended for delivery at that location and specified in the Pricing Pages, at no time shall property belonging to the West Virginia Department of Transportation be utilized by the vendor as a lay-down or storage facility, or items left with the intention of being distributed to an alternate location.

6.5 Return of Unacceptable Items: The decision of the WVDOH District Engineer or their designee regarding materials, workmanship, quality etc., shall be final per the Standard Specs Section 105.1, as amended. If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either arrange for

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the return within five (5) days of being notified that items are unacceptable or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

- 6.6 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

7. VENDOR DEFAULT:

- 7.1** The following shall be considered a vendor default under this Contract.
- 7.1.1** Failure to provide Contract Items in accordance with the requirements contained herein.
 - 7.1.2** Failure to comply with other specifications and requirements contained herein.
 - 7.1.3** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 7.1.4** Failure to remedy deficient performance upon request.
- 7.2** The following remedies shall be available to Agency upon default.
- 7.2.1** Immediate cancellation of the Contract.
 - 7.2.2** Immediate cancellation of one or more release orders issued under this Contract.
 - 7.2.3** Any other remedies available in law or equity.

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8. MISCELLANEOUS:

- 8.1 No Substitutions:** Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2 Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.
- 8.3 Reports:** Vendor shall provide the Agency with quarterly reports, annual summaries, and/or monthly reports as requested by the Agency and/or the West Virginia Purchasing Division showing quantities, total dollar value of the Contract Items purchased, ordered, shipped & invoiced with dates in spreadsheet format as defined by the Agency. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract Manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract Manager and his or her contact information below.

Contract Manager: Karen Engelbrecht
Telephone Number: 312-316-0866
Fax Number: 740-223-3874
Email Address: KEngelbrecht@NASi-tm.com

Vendor shall inform the Agency in writing of any changes to the information provided above within 10 calendar days of such changes. Failure to comply may be grounds for cancellation of this contract.

CMA vs. sodium formate solid deicer

Properties		CMA*	NASI SF
Composition	Active ingredient	96% minimum calcium magnesium acetate	98% sodium formate minimum
	Inert material, plus corrosion inhibitor	4% maximum	<2%
Appearance	granules or round balls	Typically round pellets	granules, not round
Particle size	Sieve 4 / 14	90% / 10%	particle size 2 - 6 mm
Bulk density	g/cm ³	0.65 - 0.79	0.90 - 1.0
pH	Diluted, 10%	8 - 10	9 - 11
Odor	per SDS	Vinegar odor	Odorless
Performance	Effective to (eutectic/freeze point)	similar to salt, about 20°F	0°F
	Prevents bonding of snow/ice to pavement	yes	yes
Corrosion inhibition	Aluminum, Weight loss after total immersion in 15% water solution	no test data given	<0.05 mg/cm ² /24hrs
	Magnesium, dichromate, Weight loss after total immersion in 15% water solution	no test data given	<0.1 mg/cm ² /24hrs
	Titanium, Weight loss after total immersion in 15% water solution	no test data given	<0.05 mg/cm ² /24hrs
	Carbon Steel, Weight loss after total immersion in 15% water solution	no test data given	<0.05 mg/cm ² /24hrs
	Concrete scaling, 50 freeze/thaw cycles, ASTM C-672, 25% solid deicer soln. in H ₂ O	no test data given	rating 1, passes
Environment	Aquatic Toxicity, Daphnia Magna, 48 hours	>1000 mg/L	3000 mg/L
	Aquatic Toxicity, Fathead Minnow, 96 hours	no test data given	3375 mg/L
	BOD, kg oxygen/kg solid	20 day, 10°C = 0.67	5 day, 20°C = 0.20
	TOD/COD, mg O ₂ /kg solid	no test data given	0.25
	No nitrogen or chlorides	correct	correct
Application**	Grams per square meter	20 - 40	20 - 40
Contractor	Warranty	none	3 years as packaged
	Quality Assurance	ISO9000:2008	ISO9001:2015 and NACD

* based on information from <https://www.peterschemical.com/calcium-magnesium-acetate/>, and linked MSDS and spec sheet.

** Application rates are only meant as a recommendation. Every snow/ice occurrence is different so rates will vary, depending on situation. Rate guide available upon request.

Table prepared by Karen Engelbrecht, NAS, LLC 12/11/19



NASiTM

SF

NASi SFTM (Sodium Formate) is an advanced, non-chloride granulated solid that meets the latest edition of SAE AMS1431E. It is especially effective in applications sensitive to corrosion and chloride salt accumulation. Because it is a formate, it also helps to reduce the environmental impact compared to acetate and chloride-based deicers. Use on parking decks, stadiums, institution grounds, parks, bridges, and other chloride sensitive areas.

TYPICAL PROPERTIES

Active Ingredients	98% min
pH, 10% Solution	9.5-11
Specific Gravity @ 68°F (20°C)	0.9-0.95
Bulk Weight	59.3 lbs/ft ³
Appearance	white crystalline solid
Odor	very slight
Water Miscibility	81 g pr 100 ml @ 20°C
Freezing Point	-8°F (-22°C)
BOD (5 day), kg O ₂ /g of fluid @ 68°F (20°C)	0.20
COD kg O ₂ /g of fluid @ 68°F (20°C)	0.25
Flash Point °F	> 200



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SAFETY DATA SHEET

Product #: See Section 1

Name of Product:

NASI SF

New Issue: May 27, 2016

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **NASI SF**
SYNONYMS: Formic acid sodium salt
PRODUCT CODES:

COMPANY IDENTIFICATION: NACHURS ALPINE SOLUTIONS

CORPORATE ADDRESS: 421 Leader Street, Marion, OH43302, United States

PHONE: 800-622-4877 (USA)
800-265-2268 (CANADA)

EMERGENCY PHONE: United States: Chemtrec: 800-424-9300 (CCN 15189)
Canada: CANUTEC: 1-613-996-6666
I TECH: 1-877-324-4402

CHEMICAL NAME: Sodium Formate
CHEMICAL FAMILY: Formic Acid, Sodium Salt
CHEMICAL FORMULA: HCOONa

PRODUCT USE: Solid Deicer

SECTION 2: HAZARDS IDENTIFICATION

GHS ELEMENTS:

Hazard Classification: Skin Irritation (Category 3).
Eye Irritation (Category 2B).
Acute Toxicity – Inhalation (Category 5).

Pictogram: None Required.

Signal Word: Warning

Hazard Statements: Causes mild skin irritation.
Causes eye irritation.
May be harmful if inhaled.

Precautionary Statements: Use only outdoors or in a well ventilated area. Avoid breathing dust.
Wash skin thoroughly after handling. Wear protective gloves, clothing, eye and face protection.
If swallowed, rinse mouth. Do NOT induce vomiting.
If on hair or skin, remove all contaminated clothing and rinse skin with water.
If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If in eyes, rinse carefully with water for several minutes. Remove contactlenses, if able and continue rinsing.
Immediately call a poison center or doctor/physician. See First Aid instruction for specific treatment.
If skin irritation occurs, get medical attention.
If eye irritation persists, get medical attention.
If you feel unwell, call a poison center or doctor/physician.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation.
SKIN: May cause irritation.
INGESTION: May cause irritation.
INHALATION: May cause irritation. Do not inhale dust.

ACUTE HEALTH HAZARDS: N/A

CHRONIC HEALTH HAZARDS: N/A

SAFETY DATA SHEET

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **NASi SF**

New Issue: May 27, 2016

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

CARCINOGENICITY:

OSHA: N/A
ACGIH: N/A
NTP: N/A
IARC: N/A
OTHER: N/A

SECTION 2 NOTES: Human health effects of overexposure may cause skin or eye irritation or skin rash, tearing, or blurring of vision.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:	Sodium Formate Corrosion Inhibitor	>98% <2.0%	CAS# 141-53-7 Proprietary
SARA 313 REPORTABLE:	N/A		
OSHA PEL-TWA:	N/A		
OSHA PEL STEL:	N/A		
OSHA PEL CEILING:	N/A		
ACGIH TLV-TWA:	N/A		
ACGIH TLV STEL:	N/A		
ACGIH TLV CEILING:	N/A		

SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. If irritation persists, seek medical attention.

SKIN: May be harmful if absorbed through skin. May cause skin irritation. Wash thoroughly with soap and water. If irritation persists, seek medical attention.

INGESTION: No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

INHALATION: May be harmful if inhaled. May cause respiratory tract irritation. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not flammable.

FLAMMABLE LIMITS IN AIR: (% BY VOLUME) UPPER: N/A
LOWER: N/A

FLASH POINT: >200°F (93°C)

METHOD USED: Tagged closed cup.

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION:

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **NASi SF**

New Issue: May 27, 2016

OTHER: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0
PROTECTION: B

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, Sodium/sodium oxides

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Before handling any spills, always observe the safety precautions described in Section 8. Spills can be removed in the dry form with suitable equipment or flushed away with large quantities of water.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Hygroscopic. Store in a cool dry, well-ventilated area in tightly closed containers. Keep away from acids.

OTHER PRECAUTIONS: N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Keep container tightly closed and protect from moisture. Use ventilation that is adequate to keep employee exposure to airborne dust limited.

VENTILATION: Use ventilation that is adequate to keep employee exposure to airborne dust limited. A dust mask is recommended when handling large quantities in small confined non-ventilated area.

RESPIRATORY PROTECTION: Respiratory protection is not required under normal circumstances. If material is misted, use appropriate NIOSH approved respirator of self-contained breathing apparatus.

EYE PROTECTION: Coverall Chemical splash goggles and full face shield.

SKIN PROTECTION: Rubber or plastic gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: Always follow good safety and industrial hygienic practices.

EXPOSURE GUIDELINES: See section 2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: white granules

ODOR: slight specific odor.

ODOR THRESHOLD: No data available.

PHYSICAL STATE: Solid/crystalline granular

pH: 10.0-12.0 (10% solution)

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **NASi SF**

New Issue: May 27, 2016

BOILING POINT: F°: Unknown
C°: Unknown

MELTING POINT: F°: >608
C°: >320

FREEZING POINT: F°: N/A
C°: N/A

FLASH POINT: F°: >200
C°: >93

METHOD USED: Tagged Closed Cup

EVAPORATION RATE: N/A

FLAMABILITY: Not flammable.

FLAMMABLE LIMITS IN AIR: UPPER: N/A
(% BY VOLUME) LOWER: N/A

VAPOR PRESSURE (mmHg): N/A

SPECIFIC GRAVITY (kg/m³): 900-950

VAPOR DENSITY (AIR = 1): N/A

DENSITY @ 20°C 0.9-1.0 kg/l

SOLUBILITY IN WATER: soluble (>3.75 lbs./gal.)

PARTITION COEFFICIENT: n-octanol/water – N/A

PERCENT SOLIDS BY WEIGHT: >98

PERCENT VOLATILE: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

AUTOIGNITION TEMPERATURE: N/A

THERMON DECOMPOSITIONS: N/A

MOLECULAR WEIGHT: 174.2

SECTION 10: STABILITY AND REACTIVITY

	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	Prevent contamination with other chemicals	
INCOMPATIBILITY (MATERIAL TO AVOID):	Contact with acids	
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Thermal decomposition may generate	

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **NASi SF**

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carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Acute oral toxicity LD50: >2000 mg/kg (rats).IE
Acute inhalation toxicity LC50: >680 mg/m³ (dust, rats, 4 hrs.).
LC0: >680 mg/m³ (dust, rats, 4 hrs). No mortality during 14 day observation.
Skin irritation: nonirritant (Rabbits).
Eye irritation: nonirritant (Rabbits).

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Biological elimination: >90% (Static test, 7 days) DIN 38 412-L25) Toxicity to bacteria EC₅₀> 10000 (OECD 209, after 3 hours)
Chemical oxygen demand COD: - 211 mg oxygen/g. (DIN 38409-H41) Daphnia acute toxicity EC₅₀: 3.3 g/l (24h); 3.2 g/l (48h)
EC50: 4.8 g/l (24h); 4.4 g/l (48h)
Fish Toxicity LC50: 1000 mg/l (96 h, Zebra fish, OECD 203)

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Reclaim and reuse as much as possible. Dispose in accordance with all federal, state, and local regulations.

RCRA HAZARD CLASS: N/A

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME: NASi SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: N/A

WATER TRANSPORTATION:

PROPER SHIPPING NAME: NASi SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

AIR TRANSPORTATION:

PROPER SHIPPING NAME: NASi SF (Sodium Formate)
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENTS: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT): Yes

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): No

SAFETY DATA SHEET

Product #: See Section 1

Name of Product: **NASi SF**

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SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION: *Technical Services*

DISCLAIMER: The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and NACHURS ALPINE SOLUTIONS will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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New Issue: 27 May 2016



MARKET SEGMENTS ▾ PRODUCTS ▾
BLOG ABOUT CUSTOMER SERVICE

Solid Storage & Handling

Storage Recommendations

Due to their hygroscopic nature, all solid de-icing products will conglomerate and solidify to a certain extent over time in certain conditions. NASi SF technology has advanced with improved formulating, manufacturing, and packaging techniques. With proper handling and storage NASi SF will remain easy to handle. Always store indoors or under cover to keep NASi SF dry. It is recommended to store product in its original packaging on a pallet. Open bags should be tightly sealed.



MARKET SEGMENTS ▾ PRODUCTS ▾
BLOG ABOUT CUSTOMER SERVICE

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The Science of Deicing®

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Product Description

Alpine Ice-Melt®, a 50% w/w potassium acetate solution, is an environmentally safe and effective alternative to chlorides. It is friendlier to corrosion sensitive infrastructures such as bridges and parking decks, and is effective in the most extreme winter conditions. Alpine Ice-Melt is listed as a Pacific Northwest Snowfighters (PNS) qualified product with an exceptional corrosion % rate effectiveness. Alpine Ice-Melt is actively applied to bridges by various DOT's.

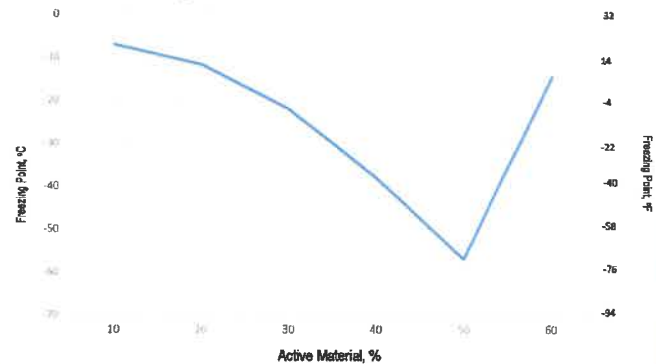


Typical Properties

Active Ingredients	50%
pH	9.5–10.5
Specific Gravity @ 20°C	1.27–1.30
Density, lb/gal @ 20°C	10.58–10.83
Appearance	Clear, nearly colorless liquid*
Odor	Mild, Characteristic
Water Miscibility	Complete
Freezing Point	-72°F (-58°C)
BOD (5 day), g O2/g of fluid	0.25
COD, g O2/g of fluid	0.35

*Available tinted blue by request

Potassium Acetate Freeze Curve



Liquid Application Rates

Local conditions such as ground and air temperatures, the frequency and intensity of precipitation (freezing rain, sleet, snow, rain or a mixture), humidity, and surface materials and application equipment will have significant effect on fluid and/or solid de-icer requirements. Liquid properties including viscosity, specific gravity and surface tension as well as temperature will influence nozzle selection and spray pressure. Suggested application rates are only to be taken as a starting point. Lane mile rates are assuming a 12 ft. wide lane.

Alpine Ice-Melt® may be used as an anti-icer or de-icer. It is ready to use and requires no dilution, mixing, or heating.





Anti-icing

The most efficient use of Alpine Ice-Melt® is as an anti-icer. Pre-treat the pavement uniformly before the onset of precipitation to help prevent the adhesion of ice and snow and ease mechanical removal.

For the best anti-icer performance, loose snow should be mechanically removed prior to applying.

SUGGESTED MINIMUM APPLICATION RATE:
½ gal per 1,000 sq. ft.
22-42 gal per lane mile

De-icing

when using Alpine Ice-Melt® as a de-icer it is best applied in bands using high diffusion nozzles. This allows the fluid to penetrate the ice to break the bond with the surface to ease mechanical removal.

SUGGESTED APPLICATION RATE:
1 gal per 1,000 sq. ft. for thin ice and increase depending on the thickness of the accumulation – approximately 3 gal per 1,000 sq. ft. for ice up to an inch thick.
44-84 gal per lane mile

Pre-wetting Solid

alpine Ice-Melt® improves the effectiveness of solid de-icers and sand.

Alpine Ice-Melt® can be sprayed directly on sand or solid de-icer or on the pavement when spreading.

SUGGESTED APPLICATION RATE:
The estimated application rate range is 5% to 15% by weight of solid material. This is approximately 1.25 gal of Alpine Ice-Melt® per 100 lbs. of sand or solid de-icer.

Liquid Storage & Handling*

NASI anti-icer/de-icer liquid products are formulated with a proprietary corrosion inhibitor package to improve its compatibility with copper, brass, aluminum, aluminum alloys, zinc and other metals and alloys. The corrosion inhibitors work by forming a protective barrier between the metal and the product.

All equipment surfaces that are frequently exposed to de-icing chemicals should be routinely rinsed with warm water (especially before and after the winter season) to prevent the accumulation of residue, minimize staining, and maintain equipment integrity.

Pumps: The preferred material is stainless steel, however plastic is acceptable. While the corrosion inhibitor package improves compatibility with brass, cast aluminum and cast iron, these materials should be avoided because of abrasion effects. Avoid pumps that contain zinc or galvanized wetted parts. The high abrasion effects combined with the reactivity of de-icers towards zinc will dissolve the galvanized coating.

Pipes: Acceptable materials are stainless and carbon steel, polyethylene (PE), polypropylene (PP), polyvinyl chloride (PVC), polyvinylidene fluoride (PVDF), butyl and natural rubber. Minimize contact with zinc or galvanized metals. While welded or flanged pipe joints are recommended, threaded

fittings and joints are acceptable when a high quality pipe sealant is applied.

Seals and Gaskets: Recommended materials are natural and butyl rubber, ethylene propylene rubber (EPR, EPM, EPDM) and isoprene. Neoprene and nitrile (Buna-N) rubbers are acceptable. Materials to avoid are: any type of silicon rubber, styrene butadiene (Buna-S), polyurethane, polyacrylate, fluorosilicone and fluorocarbon rubbers and butadiene.

Tanks: Stainless steel, fiberglass or polyethylene tanks are recommended. If clean and rust-free, alloy steel or carbon steel tanks may be used. While acceptable in the presence of the corrosion inhibitor package, aluminum tanks should be avoided for long term storage. Ensure tanks are designed to accommodate the viscosity, relatively high density, and low surface tension. Containment should be compliant with local regulatory requirements. Prior to fill, inspect tanks to ensure they are free of residue, rust, or other particulates.

***See SDS for additional information. Please follow the Personal Injury Protection (PIP) Guidelines regarding first aid and special protection.**

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Alpine Ice Melt

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous

Products Regulation (February 11, 2015).

Revision Date: 12/04/2020

Date of Issue: 05/03/2018

Version: 2.1

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Alpine Ice Melt

Product Number: I000008, I000037, I000102, F000138, F000273, F000277, F000278, F000318

1.2. Intended Use of the Product

Deicer.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Nachurs Alpine Solutions

421 Leader St.

Marion, OH 43302

740-382-5701

1.4. Emergency Telephone Number

Emergency Number : CHEMTREC: 1-800-424-9300 (USA)

CANUTEC: 1-613-996-6666 (CANADA)

QM: 1-887-387-7745 (CANADA)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

2.2. Label Elements

GHS-US/CA Labeling

No labeling applicable

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Potassium acetate	(CAS-No.) 127-08-2	45 - 55	Not classified
Water	(CAS-No.) 7732-18-5	45 - 55	Not classified
Corrosion inhibitor	(CAS-No.) Proprietary	< 1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Alpine Ice Melt

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Potassium oxides. Sodium oxides.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Alpine Ice Melt

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Deicer.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear to Nearly Colorless
Odor	: Characteristic, Slight Acetic
Odor Threshold	: Not available
pH	: 9.5 - 10.5
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: > 100 °C (> 212 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not available

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Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Density	: 10.58 - 10.83 lb/gal
Specific Gravity	: 1.27 - 1.30
Solubility	: Complete
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Similar to Water

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. **Hazardous Decomposition Products:** None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Potassium acetate (127-08-2)	
LD50 Oral Rat	3250 mg/kg
LD50 Dermal Rabbit	> 20000 mg/kg
LC50 Inhalation Rat	> 5.6 mg/l/4h

Skin Corrosion/Irritation: Not classified

pH: 9.5 - 10.5

Eye Damage/Irritation: Not classified

pH: 9.5 - 10.5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Potassium acetate (127-08-2)	
LC50 Fish 1	6800 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])

12.2. Persistence and Degradability

Alpine Ice Melt	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Alpine Ice Melt	
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Bioaccumulative Potential	Not established.
Potassium acetate (127-08-2)	
BCF Fish 1	(no bioaccumulation expected)

12.4. Mobility in Soil

Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, provincial, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

- 14.1. **In Accordance with DOT** Not regulated for transport
- 14.2. **In Accordance with IMDG** Not regulated for transport
- 14.3. **In Accordance with IATA** Not regulated for transport
- 14.4. **In Accordance with TDG** Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Potassium acetate (127-08-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. **US State Regulations** Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed

15.3. Canadian Regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List)
Potassium acetate (127-08-2)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 12/04/2020

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)

SECTION 1: IDENTIFICATION

1.1. **Product Name:** Alpine Ice Melt
 1.2. **Other Names:** Other names used for this product.
 1.3. **Other Address:** Other address information.

SECTION 2: HAZARD IDENTIFICATION

2.1. **Hazardous Ingredients:** List of hazardous ingredients and their concentrations.
 2.2. **Classification:** GHS hazard and P hazard statements.
 2.3. **Signal Word:** Danger or Warning.
 2.4. **Pictograms:** Symbols representing the hazards.
 2.5. **Precautionary Statements:** Measures to minimize the risks.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.1. **Chemical Name:** Chemical name of the hazardous ingredient.
 3.2. **Chemical Formula:** Chemical formula of the hazardous ingredient.
 3.3. **Chemical Structure:** Chemical structure of the hazardous ingredient.
 3.4. **Other Information:** Other information on the hazardous ingredient.

SECTION 4: FIRST AID MEASURES

4.1. **General Information:** General information on first aid measures.
 4.2. **Eye Contact:** First aid measures for eye contact.
 4.3. **Inhalation:** First aid measures for inhalation.
 4.4. **Swallowing:** First aid measures for swallowing.
 4.5. **Skin Contact:** First aid measures for skin contact.

SECTION 5: FIRE FIGHTING MEASURES

5.1. **Flammability:** Flammability of the product.
 5.2. **Flash Point:** Flash point of the product.
 5.3. **Auto-ignition Temperature:** Auto-ignition temperature of the product.
 5.4. **Decomposition Temperature:** Decomposition temperature of the product.
 5.5. **Other Information:** Other information on fire fighting measures.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. **Personal Protection:** Personal protection measures.
 6.2. **Environmental Protection:** Environmental protection measures.
 6.3. **Spill Cleanup:** Spill cleanup procedures.
 6.4. **Other Information:** Other information on accidental release measures.

SECTION 7: HANDLING AND STORAGE

7.1. **Handling:** Handling instructions.
 7.2. **Storage:** Storage instructions.
 7.3. **Other Information:** Other information on handling and storage.



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REFERENCE LIST OF CURRENT NASI-SF USERS

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317-638-5840
TBolinger@denisonparking.com

Chris Pasquini, Asst. Maintenance Mgr., Ph. (518) 242-2379
Email: cpasquini@albanyairport.com
Albany International
737 Albany Shaker Road
Albany, NY 12211

Jay Ball, Director of Facilities & Grounds, Ph. (540) 362-1999, ext. 277
Email: JayB@flyroa.com
Roanoke Regional Airport Commission
5202 Aviation Drive
Roanoke, VA 24012

Irene Seyler, Ph. (814) 833-5258
Email: iseyler@erieairport.org
Erie International Airport
Tom Ridge Field
4411 West 12th Street
Erie, PA 16505-0393

Through our distributor Schoenberg Salt
DHL & Amazon, Cincinnati, OH
Mid-America St. Louis Airport
AeroSnow (Services JFK & other Airports)

The following uses IceShield (a CMA-containing coated salt product) deicer for DOT – type accounts.
Earl Hudson Ph (757) 385-2069
City of Virginia Beach
Parks & Recreation
4141 Dam Neck Rd.
Virginia Beach, VA 23456



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ALPINE ICE MELT AND ALPINE RF-11 REFERENCES

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Erin Henderson, PA
Roanoke Regional Airport
540-362-1999 x283
Erin.henderson@flyroa.com

State of West Virginia



Certificate

I, Mac Warner, Secretary of State of the State of West Virginia, hereby certify that

NACHURS ALPINE SOLUTIONS, LLC

was duly authorized under the laws of this state to transact business in West Virginia as a foreign limited liability company on November 16, 2018.

The company is filed as an at-will company, for an indefinite period.

I further certify that the company has not been revoked or administratively dissolved by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Cancellation or Termination to the company.

Accordingly, I hereby issue this Certificate of Authorization

CERTIFICATE OF AUTHORIZATION

Validation ID:7WV7F_PTT8M

*Given under my hand and the
Great Seal of the State of
West Virginia on this day of*

March 29, 2023

Mac Warner

Secretary of State

