

**Standard Purchasing Resolution 2: Award to Low Bidder Meeting Specifications –  
Department of Public Works Gas Detection System**

Resolution #2020-09-138-J-4d

RESOLVED, That Troy City Council hereby **AWARDS** a contract for the purchase and installation of a Gas Detection System located at the Department of Public Works; as per bid specifications to the low bidder meeting specifications; *Ino-Tec, Inc. of Ray, MI* for an estimated cost of \$64,927 at prices contained in the bid tabulation opened September 10, 2020; a copy of which shall be **ATTACHED** to the original Minutes of the meeting, with a 15% contingency of \$9,740 for an estimated grand total amount of \$74,667 not to exceed budgetary limitations.

BE IT FURTHER RESOLVED, That the award is **CONTINGENT** upon contractor's submission of properly executed contract documents, including insurance certificates and all other specified requirements.

# PURCHASE ORDER

No. 2021-00000413

DATE: 10/01/2020

PAGE: 1 of 1

FOB DESTINATION

Ship To

CITY OF TROY  
Building Operations  
4693 ROCHESTER ROAD  
TROY, MI 48085

Bill To

CITY OF TROY  
Building Operations  
4693 ROCHESTER ROAD  
TROY, MI 48085

**COUNCIL RESOLUTION**  
2020-09-129-J-4d

VENDOR NO. 160110

## CHANGE ORDER

Vendor

INO-TEK  
68950 POWELL ROAD PO BOX 502  
ROMEO, MI 48065

QUANTITY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1	Lump Sum	REPLACEMENT AND INSTALLATION of Gas Detection System As per ITB-COT 21-08 and as per Quote #Q20-8189 and shall include System Content, Electrical and Fire Alarm System Interface Installation by INO-TEK. The pricing also includes a one-year system warranty and maintenance. Quarterly calibrations and one annual certification is also included.	64,927.0000	\$64,927.00

Entered By: MaryBeth Murz

\$64,927.00

**Special Instructions:**

CITY COUNCIL AWARD DATE: 9/21/2020. CERTIFICATE OF INSURANCE and ENDORSEMENT SHALL BE ON FILE FOR DURATION OF PROJECT AND INSTALL. BID DEPOSIT CHECK #2015498 in the amount of \$5,000.00 shall be held until successful completion of the installation.

**TERMS & CONDITIONS**

1. Purchases of Municipalities are exempt from State Sales and Federal Excise Taxes.
2. Prior to acceptance, vendor agrees to provide City with information under the Right-to-Know Law, P.A. 1986, No. 80, and fully comply with all terms and conditions of the Michigan Occupational Safety and Health Act, MCL 408.1001, et seq. including vendor shall provide City with an "MSDS". Vendor also agrees to be responsible for all required labeling.
3. In cases of emergency/disaster, the City can purchase up to six(6) times the order amount for a period of six(6) months at the price contained in the contract.
4. Purchase Orders are signed electronically based upon computer generated "on-line" authorized approvals. Authentic signatures are on file in the City of Troy Purchasing Department.

NOTICE: The City could put the vendor on notice that vendors will be held financially responsible for any claims or awards made against the City as a result of the vendor's action. If the City has to defend the initial lawsuit, the City will bring in the vendor as a co-defendant or sue the vendor, either as the result of settling a claim or the conclusion of the lawsuit.

I HEREBY CERTIFY THAT THIS ORDER IS PROPERLY AUTHORIZED AND APPROVED.

*MaryBeth Murz*

Opening Date: 09/10/2020  
 Date Reviewed: 09/10/2020

CITY OF TROY  
 BID TABULATION  
 GAS DETECTION SYSTEM

ITB-COT 21-08  
 Page 1 of 1

VENDOR NAME:	Ino-Tek, Inc.	Coritech Services, Inc.
CITY:	Ray, MI	Royal Oak, MI
CHECK #:	2015498	9227036099
CHECK AMOUNT:	\$5,000.00	\$5,000.00

**PROPOSAL: A single prime contract based on a Stipulated Price as specified to furnish all labor, equipment materials, and supplies, to complete the Gas Detection System project in accordance with the bid specifications.**

<b>BASE BID PRICE:</b>		<b>\$64,927.00</b>	<b>\$118,722.00</b>
Can Meet Qualifications:	Y or N	Y	Y
Hours of Operation:		M-F 7:30AM - 4:30PM	7:30AM - 4:30PM
Contact Phone #:		586-336-0856	313-433-4429
Proposed Payment Schedule:		50% Upon delivery, 40% After completion of installation, 10% After final testing. Net 30	Completion of engineering, delivery of materials and commissioning/sign off.
References:	Y or N	Y	Y
Can Meet Insurance:	Y or N	Y	Y
Payment Terms:		Net 30	Net 30
Warranty:		Not Specified	1 yr. from date of acceptance
Completion:		Not Specified	12-16 weeks ARO
Exceptions:	Y or N	N	N
Acknowledgement:	Y or N	Y	Y
Forms:	Y or N	Y	Y
		<b>Low Bid Specified.</b>	

\* No Bid Response from one vendor

**ATTEST:**

(\*Bid Opening conducted via a Go-To Meeting)  
 Dennis Trantham  
 \_\_\_\_\_  
 Kristine Kallek  
 \_\_\_\_\_  
 Jackie Ahlstrom  
 \_\_\_\_\_  
 Beth Zaccardelli  
 \_\_\_\_\_

\_\_\_\_\_  
 MaryBeth Murz,  
 Purchasing Manager



**CITY OF TROY  
BID PROPOSAL**

ITB-COT 21-08  
Page 1 of 9

The undersigned proposes to complete the **GAS DETECTION SYSTEMEM** in accordance with the attached bid specifications, drawings, and renderings that are to be considered an integral part of this bid proposal, at the following prices:

**COMPANY NAME:** Ino-Tek, Inc.

The bid document contains the following sections:

Instructions to Bidders (2 pages)	Consent of Surety - Sample (1 page)
Bid Proposal (9 pages)	Specifications ( 4 pages)
Forms (9 forms)	Sample Insurance Certificate (4 pages)
Public Act 57 (2 pages)	Statement of No Bid (1 page)

**PROPOSALS:** The undersigned as bidder declares that he/she having examined the plans and specifications with the related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including availability of materials and labor, hereby proposes to complete the Project which consists of the Gas Detection System at the DPW Maintenance Garage in Troy, Michigan. The Work of the Project is defined by the Contracts Documents and consists of the following:

**Streets Equipment Garage – Zone 1**

1. Demo and remove existing automatic fan control time clock and hardware. Field verify device locations.
2. Remove and replace existing Exhaust Fan Starter three –position selector switches and install new two-position switch and tag 'Auto-On'. Provide interlock for gas detection system operation as required.
3. Wire new gas detection system controls to new updated fan controls. Gas detection fan controls shall operate in the automatic mode and start all area roof mounted exhaust fans (EF) and open wall mounted dampers upon reaching first level gas setpoint. Provide adjustable time delay off.
4. System shall operate audible and visual alarms upon reaching second level gas setpoint. Provide adjustable time delay on.
5. Trouble alarm shall operate exhaust fan controls as specified above.

**Fleet Maintenance – Zone 2**

1. Demo and remove existing gas detection sensor and horn/strobe hardware. Field verify device locations.
2. Remove and replace existing Exhaust Fan Starter three-position selector switch and install new two-position switch and tag 'Auto-On'. Provide interlock for gas detection system operation as required.
3. Wire new gas detection system controls to new updated fan controls. Gas detection fan controls shall operate in the automatic mode and start all area roof mounted exhaust fans (EF) and make up air unit (MUA) upon reaching first level gas setpoint. Provide adjustable time delay off.
4. System shall operate audible and visual alarms upon reaching second level gas setpoint. Provide adjustable time delay on.
5. Trouble alarm shall operate exhaust fan controls as specified above.

**Water Equipment Garage – Zone 3**

1. Demo and remove existing gas detection sensor and horn/strobe hardware. Field verify device locations.
2. Remove and replace existing Exhaust Fan Starter three-position selector switch and install new two-position switch and tag 'Auto-On'. Provide interlock for gas detection system operation as required.
3. Wire new gas detection system controls to new updated fan controls. Gas detection fan controls shall operate in the automatic mode and start all area roof mounted exhaust fans (EF) and make up air unit (MUA) upon reaching first level gas setpoint. Provide adjustable time delay off.
4. System shall operate audible and visual alarms upon reaching second level gas setpoint. Provide adjustable time delay on.
5. Trouble alarm shall operate exhaust fan controls as specified above.

**BID PROPOSAL:** A single prime contract based on a Stipulated Price as specified to furnish all labor, equipment materials, and supplies, to complete the project in accordance with the bid specifications, within the time set forth therein, and at the price stated below. The price shall cover all expenses incurred in performing the work required under the contract documents, of which this Proposal is part.

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**BASE BID: Provide all labor, materials, tools, equipment and supervision required for the furnishing and installing of all work herein described and/or shown on the drawings and as per all bid specifications.**

**BASE BID PRICE:**                     \$64,927.00                    

**QUALIFICATIONS:**

Installers shall have a minimum of 5 years' experience and shall be licensed in the design and provision of State of Michigan Code Compliant, Life Safety / Fire Protection, Gas Detection and Hazardous Material Emergency Alarm Systems , and shall engineer, design, and supply these systems as a normal course of that company's business.

**MEETS QUALIFICATIONS**                        ✓   Yes                                 No

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**ADDITIONAL INFORMATION:**

For additional information or questions concerning this project, please contact Mr. Dennis Trantham, Facilities and Grounds Operations Manager at (248) 524-3503 or dennis.trantham@troymi.gov between the hours of 8:00 a.m. to 4:00 p.m., Monday through Friday.

**SITE INSPECTIONS:**

All bidders should examine the site to determine the amount and scope of work to be performed as per the bid specifications. If the bidder does not make a site inspection, that bidder accepts full responsibility and risk for any errors or omissions in his/her bid proposal.

**PERMITS:**

All work performed must meet City and State Code. The Contractor shall obtain all applicable and required permits and arrange for inspections. All fees for said permits will be waived.

**BID DEPOSIT AND FORFEITURE:**

The bid deposit of the lowest bidder shall be forfeit if, after bid opening, a change in the bid price or other provision of the bid is required by the bidder that is prejudicial to the interest of the City of Troy or fair competition.

**AWARD:**

The evaluation and award of this bid shall be a combination of factors, including but not limited to: cost, professional competence, equipment, references, and the correlation of the bid proposal submitted to the needs of the City of Troy.

The City of Troy reserves the right to award this bid to the lowest responsible bidder meeting specifications for each proposal; to combine proposals if deemed in the City's best interest to do so; to reject low bids which have major deviations from specifications; to accept a higher bid which has only minor deviations, whatever is deemed to be in the City of Troy's best interest

**DOWNPAYMENTS AND PREPAYMENTS:**

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

**DELIVERY:**

All materials are to be F.O.B. delivered, freight paid, to the DPW Maintenance Garage site.

**CONTACT INFORMATION:**

Hours of operation: Monday-Friday 7:30am - 4:30pm 24 Hr. Contact Phone No. (586) 336-0856

**WARRANTY:**

System shall include minimum one (1) year equipment parts and labor warranty. Warranty Period shall include four (4) quarterly sensor / system calibration site visits with reports and shall also include one (1) annual recertification inspection and testing with report submitted to City of Troy Authorities having Jurisdiction (AHJ) at the end of the warranty period. Shall also include all calibration hardware, gases, sensor elements, filters, etc. as required during the warranty period.

COMPANY NAME: Ino-Tek, Inc.

**LOCAL PREFERENCE:**

The City of Troy reserves the right to award a contract to a local business, one that pays City of Troy taxes (real and/or personal), if the bid of a local vendor is within 5% of the lowest responsive and responsible non-local bidder, then the local vendor is given one chance to match the low bid.

**PURCHASE ORDER:**

After the Troy City Council has approved the award, the City of Troy Purchasing Department will send an award letter to the successful bidder(s). The successful bidder(s) once notified, will be required to submit the specified bonds. A purchase order will be issued in approximately one-week and released, once acceptable bonds and insurance are received. A purchase order issued in conjunction with the Contract Form (provided in the Forms Section) from the City of Troy will create a bilateral contract between the parties, and the successful bidder(s) shall commit to perform the contract in accordance with specifications.

**CONTRACT FORMS:**

Bidders should complete and sign the Legal Status of Bidder, Non-Collusion Affidavit, Certification regarding Debarment, the Certification regarding "Iran Linked Business" and the Familial Disclosure Forms and return with your bid proposal. Due to COVID-19 restrictions the City is waiving Notary requirements; but note that all forms must be signed and dated.

**CONTRACT TERMINATION:** The City of Troy shall reserve the right to terminate the contract upon written notice due to poor performance. The City of Troy designated representative will be solely responsible for determining acceptable performance levels. His/her decision will be deemed in the City of Troy's best interest and will be final. The City of Troy reserves the right to re-award the contract to the next low bidder or re-bid the contract.

**TERMINATION FOR CONVENIENCE:**

The City may cancel the contract for its convenience, in whole or in part, by giving the contractor written notice 30 days prior to the date of cancellation. If the City chooses to cancel this contract in part, the charges payable under this contract shall be equitably adjusted to reflect those services that are cancelled.

**PROGRESS PAYMENTS:**

The City of Troy will consider a progress payment schedule for work as completed in accordance with specifications. The Project Construction Manager will have final approval of the schedule as presented. No payments for work will be made until the designated City representative approves the work as complete in accordance with specifications. Prior to release of the final payment, consent of surety document (A1A Document G707) will be required and signed by the surety Company. The City of Troy reserves the right to reject the payment schedule if deemed necessary, and determine the final schedule.

Proposed Payment

Schedule 50% Upon Delivery of Equipment, 40% After Completion of Installation,  
10% After Final Testing. Net 30

*(Please submit an attachment identified as \_\_\_\_\_ if more space is necessary.)*

COMPANY NAME: Ino-Tek, Inc.

**REFERENCES:**

The City of Troy requires that your company list at least three (3) clients who have recently had similar work performed by your company during the past three years.

COMPANY: Mass Transportation Authority  
ADDRESS: 1401 S. Dort Highway, Flint MI 48503-2878  
PHONE: 810-780-8826 CONTACT: Luke Randolph  
EMAIL: Lrandolph@MTAFLINT.org

COMPANY: American Center for Mobility  
ADDRESS: 801 Kirk Profit Drive, Ypsilanti, MI 48198  
PHONE: 419-350-7101 CONTACT: Jim Rollison  
EMAIL: jim.rollison@intertek.com

COMPANY: The Rapid  
ADDRESS: 333 Wealthy Street SW, Grand Rapids MI 49503  
PHONE: 616-566-7729 CONTACT: Steve Luther  
EMAIL: sluther@RideTheRapid.org

**MICHIGAN CONSTRUCTION LIEN ACT:**

The bidder agrees that, if awarded the Contract he/she will abide by all requirements of the Michigan Construction Lien Act (P.A. 1980, No. 497) as amended and effective March 1, 1982, and to provide full and complete Sworn Statements on Owner-approved forms.

**PUBLIC ACT 57:**

Public Act 57 requires contractors to provide certain notices to governmental entities concerning improvements on real property; to allow for modifications of contracts for improvement of real property; to provide for remedies; and to repeal acts and parts of acts. This contract shall comply with all applicable provisions of Public Act 57 [a copy of the act is attached for reference (2 pages)].

**BOND SUBMITTAL:**

Subsequently, upon notice of award to the successful bidder, the Contractor shall qualify for, sign, and deliver to the City of Troy an executed Performance Bond, an executed Labor and Materials Payment Bond, and an executed one-year Maintenance Bond secured by a surety company, acceptable to the City of Troy by being licensed to do business in Michigan, and be included on the U. S. Treasury Department Surety List and/or have a rating of A (-) or better by A. M. Best, and/or Standard and Poor, on standard AIA forms, each in the amount of one hundred percent (100%) of the contract sum. Attorneys-in-fact who sign such bonds must attach a certified copy of their Power of Attorney when the bonds are submitted.

**SUBCONTRACTORS:**

The undersigned agrees to submit a list of proposed subcontractors, if applicable, for approval by the designated City representative within 72 hours after notification of being the low qualified bidder. The Contractor shall list the name and address of the proposed Subcontractors and sub-subcontractors when required by the City. Approval of a Subcontractor or sub-subcontractors will not be given unless and until it is determined by the City that he/she is qualified to perform the type and magnitude of work proposed and shall have executed a Subcontract or sub-subcontract in a form acceptable to the City. It will be understood that this may occur prior to bid award, but the bidder's status will not be final until approved by the Troy City Council.

The Contractor shall abide by the provisions set forth therein. Any item of work performed by other than the Contractor or approved Subcontractors will be considered as unauthorized and shall not be paid for under the provision of the Contract.

COMPANY NAME: Ino-Tek, Inc.



**COMPLETION SCHEDULE:**

The work shall commence upon City Council Approval. The designated City Representative shall approve the work schedule prior to the start of the project. His/her decision as to acceptability shall be deemed in the City of Troy's best interest. The City of Troy is the only party to this contract that may authorize amendment of this schedule.

**IMPORTANT INFORMATION:**

The City shall have the right to require by written order, changes in, additions to, or deductions from the work required by the Contract Documents provided that if changes, additions, or deductions are made, the general character of the work as a whole is not changed thereby. Adjustments in the Contract price, if any, because of any change, addition, or deduction in the work, shall be determined as hereinafter provided, and any claim for extension of time for completion shall be adjusted at the time of ordering the change, addition, or deduction. No claim for change, addition, or deduction, or adjusting of price, or extension of time for completion thereof, shall be made or allowed unless done in pursuance of written order from the City specifically authorizing such change, addition, or deduction. Drawings without a written order shall not be considered such authority. Written notice of such claims shall be made to the designated City representative before the commencement of the work. Where the written order diminishes the quality of work to be done, this shall not constitute a basis for a claim for damages or anticipated profits on the work that may be dispensed with.

**PREVAILING WAGES:**

This is not a Prevailing Wage project.

COMPANY NAME: Ino-Tek, Inc.

Insurance requirements shall be in accordance with the attached **SAMPLE INSURANCE CERTIFICATE and ENDORSEMENT**. The required Insurance Certificate and Endorsement must be submitted to the city within 5 days of the verbal/ electronic request after the bid award. The Insurance Certificate and Endorsement may be faxed to the Purchasing Office at (248) 619-7608, and is the only bid document accepted in this format.

The contractor, or any of their subcontractors, shall not commence work under this contract until they have obtained the insurance required, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to business in the State of Michigan and acceptable to the City of Troy. The requirements below should not be interpreted to limit the liability of the Contractor. All deductibles and self-insured retentions (SIR's) are the responsibility of the Contractor.

- (X) We can meet the specified insurance requirements.
- ( ) We cannot meet the specified insurance requirements.
- ( ) We do not carry the specified limits but can obtain the additional insurance coverage of \$ \_\_\_\_\_, at the cost of \$ \_\_\_\_\_.  
**NOTE:** Please note the amendments on a sample insurance certificate and attach it to your bid proposal.
- ( ) Our proposal is reduced by \$ \_\_\_\_\_ if we lower the requirement to \$ \_\_\_\_\_.  
**NOTE:** Please note the amendments on a sample insurance certificate and attach it to your bid proposal.

**IMPORTANT:** A Certificate of Insurance on an ACORD Form showing present coverage as well as the required endorsements SHALL be attached to the proposal document at the time of submission of the proposal to the Office of the City Clerk.

**NOTE:** Failure on the part of any bidder to contact his/her insurance carrier to verify that the insurance carried by the bidder meets City of Troy specifications may result in this proposal being completed incorrectly.

**OTHER:** Sole proprietors must execute a certificate of exemption from Worker's Compensation requirements or provide proof of Worker's Compensation Insurance. All coverage shall be with insurance carriers licensed and admitted to do business in Michigan in accordance with all applicable statutes of the State of Michigan and acceptable to the City of Troy.

**INSURANCE VERIFICATION:**

A bidder shall complete the above portion, which details additional costs that may be incurred for specified coverage without purchasing the additional coverage prior to bid submission.

**WORKERS' COMPENSATION INSURANCE,** including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

**COMMERCIAL GENERAL LIABILITY INSURANCE** on an "Occurrence Basis" with limits of liability not less than \$1,000,000.00 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included; (E) Deletion of all Explosion, Collapse, and Underground (XCU) Exclusions, if applicable.

**AUTOMOBILE LIABILITY,** including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000.00 per occurrence combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

COMPANY NAME: Ino-Tek, Inc.

**ADDITIONAL INSURED:**

Commercial General Liability and Automobile Liability, as described in the attached SAMPLE shall include an Additional Insured Endorsement stating the following shall be **Additional Insureds**: The City of Troy including all elected and appointed officials, all employees and volunteers, all boards, commissions, and/or authorities and council members, including employees and volunteers thereof. It is understood and agreed by naming the City of Troy as additional insured, coverage afforded is considered to be primary and any other insurance the City of Troy may have in effect shall be considered secondary and/or excess.

**CANCELLATION NOTICE:**

All policies, as described above, shall include an endorsement stating that it is understood and agreed that Thirty (30) days, Ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be mailed to:

City of Troy  
Purchasing Manager  
500 West Big Beaver  
Troy, MI 48084

**PROOF OF INSURANCE COVERAGE:**

The Contractor shall provide the City of Troy, at the time that the contracts are returned by him/her for execution, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable. Copies or certified copies of all policies mentioned above all shall be furnished, if so requested.

If any of the applicable coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and endorsements to the City of Troy at least ten (10) days prior to the expiration date.

**LETTER VERIFICATION:**

The recommended bidder will be notified to submit a letter from the *insurance agent or carrier* that the insurance to be supplied will meet specifications. As an alternative, the recommended bidder may submit the certificate of insurance meeting specifications at this time at his/her option. ***The City must receive this letter or certificate within 5 business days after verbal / electronic notification has been delivered to the recommended bidder or the bidder will be considered non-responsive and the bid un-awardable.*** This process will occur before presentation of the award recommendation to the Troy City Council.

**FINAL INSURANCE CERTIFICATE SUBMISSION:**


After approval by Troy City Council, the City's Purchasing Manager will review the insurance certificates and endorsements to ensure all acceptable documents have been received and allow (5) business additional days after verbal / electronic notification to submit final insurance certificate(s) in accordance with specifications. The City of Troy reserves the right to WITHHOLD AND KEEP any bid surety for failure to comply. The company will be considered in default of contract and will be barred from doing business with the City of Troy for a minimum of three (3) years for failing to meet insurance requirements.

COMPANY NAME: Ino-Tek, Inc.

**SIGNATURE PAGE**

**PRICES:**

Prices shall remain firm for 60 days or bid award, whichever comes first, except the successful bidder(s) whose prices shall remain firm through project completion and final acceptance in accordance with the bid specifications.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE: 

**NOTE:** The undersigned has checked carefully the bid figures and understands that he/she shall be responsible for any error or omission in this bid offer and is in receipt of all addenda as issued.

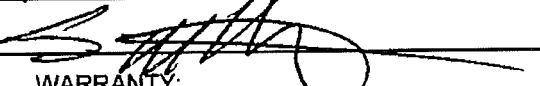
TAX ID: 38-3307768

COMPANY: Ino-Tek, Inc.

ADDRESS: 68950 Powell Road CITY: Ray STATE: MI ZIP: 48096

PHONE: (586) 336-0856 FAX NUMBER: (586) 336-0863

REPRESENTATIVE NAME: Steven J. McCarthy

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE: 

PAYMENT TERMS: Net 30 WARRANTY: \_\_\_\_\_

CHECK INCLUDED: \$5,000.00 COMPLETION: \_\_\_\_\_

EMAIL: steve.mccarthy@ino-tek.com

**EXCEPTIONS:**

Any exceptions, substitutions, deviations, etc. from the City of Troy specifications and this bid proposal must be stated below. The reason for the exception(s), deviation(s), substitution(s), are an integral part of this bid offer.

None

**ACKNOWLEDGEMENT:**

I, Steven J. McCarthy, certify that I have read the **Instructions to Bidders** (2 Pages) and that the bid proposal documents contained herein were obtained directly from the City's Purchasing Department or the MITN website, [www.mitn.info](http://www.mitn.info) and is an official copy of the Authorized Version.

SIGNATURE OF AUTHORIZED COMPANY REPRESENTATIVE: 

**IMPORTANT:** All City of Troy purchases require a **SAFETY DATA SHEET**, where applicable, in compliance with the MIOSHA "Right to Know" Law. Please include a copy of any relevant SDS at the time of bid submission.

**NOTE:** The City of Troy, at their discretion, may require the bidder(s) to supply a Financial Report from an impartial Financial Credit Reporting Service before award of contract.

**US FUNDS:** All prices are to be quoted in U. S. Currency.



**Legal Status of Bidder:**

The Bidder shall fill out the appropriate form and strike out the other two:

\_\_\_\_\_

A corporation duly organized and doing business under the laws of the State of Michigan for whom Steven J. McCarthy, bearing the office title of Vice President, whose signature is affixed to this proposal, is duly authorized to execute contracts.

\_\_\_\_\_

A partnership, all members of which, with addresses, is:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

\_\_\_\_\_

AN INDIVIDUAL, WHOSE SIGNATURE IS AFFIXED TO THE PROPOSAL:

_____	_____
-------	-------



CITY OF TROY  
OAKLAND COUNTY, MICHIGAN  
NON-COLLUSION AFFIDAVIT

TO WHOM IT MAY CONCERN:

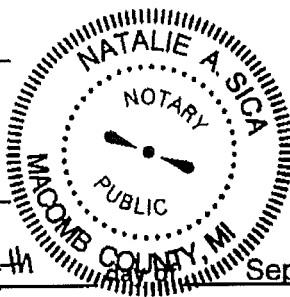
Steven J. McCarthy, being duly sworn deposed, says that he/she  
(Print Full Name)

is Vice President. The party making the foregoing proposal or bid,  
(State Official Capacity in Firm)

that such bid is genuine and not collusion or sham; that said bidder has not colluded, conspired, connived, or agree, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding and has not in any manner directly or indirectly sought by agreement or collusion, or communication or conference, with any person to fix the bid price or affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or that of any other bidder, or to secure the advantage against the City of Troy or any person interested in the proposed contract; and that all statements contained in said proposal or bid are true.

[Signature]  
SIGNATURE OF PERSON SUBMITTING BID

[Signature]  
NOTARY'S SIGNATURE



Subscribed and sworn to before me this 4th day of September, 2020 in and for  
Macomb County.

My commission expires:  
June 10, 2027

NATALIE A. SICA  
Notary Public, State of Michigan  
County of Macomb  
My Commission Expires Jun. 10, 2027  
Acting in the County of Macomb



**CERTIFICATION REGARDING  
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

The prospective participant certifies, to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, and declared ineligible, or voluntarily excluded from participation in transactions under any non-procurement programs by any federal, state or local agency.
2. Have not, within the three year period preceding, had one or more public transactions (federal, state, or local) terminated for cause or default; and
3. Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) and have not, within the three year period preceding the proposal, been convicted of or had a civil judgment rendered against it:
  - a. For the commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction (federal, state, or local), or a procurement contract under such a public transaction;
  - b. For the violation of federal, or state antitrust statutes, including those proscribing price fixing between competitors, the allocation of customers between competitors, or bid rigging; or
  - c. For the commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

I understand that a false statement on this certification may be grounds for the rejection of this proposal or the termination of the award. In addition, the general grant of this authority exists within the City's Charter, Chapter 12, Section 12.2- Contracts.

I am able to certify to the above statements.

Ino-Tek, Inc.

Name of Agency/Company/Firm (Please Print)

Steven J. McCarthy, Vice President

Name and title of authorized representative (Please Print)

Signature of authorized representative

Date 9-4-2020

I am unable to certify to the above statements. Attached is my explanation.



**VENDOR CERTIFICATION  
THAT IT IS NOT AN  
"IRAN LINKED BUSINESS"**

Pursuant to Michigan law, (the Iran Economic Sanctions Act, 2012 PA 517, MCL 129.311 et seq.), before accepting any bid or proposal, or entering into any contract for goods or services with any prospective Vendor, the Vendor must first certify that it is not an "IRAN LINKED BUSINESS", as defined by law.

<b>Vendor</b>	
Legal Name	Ino-Tek, Inc.
Street Address	68950 Powell Road
City	Ray Township
State, Zip	MI, 48096
Corporate I.D. Number/State	800433041 / Michigan
Taxpayer I.D. #	38-3307768

The undersigned, with: 1.)full knowledge of all of Vendors business activities, 2.)full knowledge of the requirements and possible penalties under the law MCL 129.311 et seq. and 3.) the full and complete authority to make this certification on behalf of the Vendor, by his/her signature below, certifies that: the Vendor is NOT an "IRAN LINKED BUSINESS" as require by MCL 129.311 et seq., and as such that Vendor is legally eligible to submit a bid and be considered for a possible contract to supply goods and/or services to the City of Troy.

Signature of Vendor's Authorized Agent:

Printed Name of Vendor's Authorized Agent:

Steven J. McCarthy

Witness Signature:

Printed Name of Witness: Natalie A. Sica





**Proposer's Sworn and Notarized Familial Disclosure**  
*(to be provided by the Proposer)*

The undersigned, the owner or authorized officer of Ino-Tek, Inc. (the "Proposer"), pursuant to the familial disclosure requirement provided in the Request for Proposal, hereby represent and warrant, except as provided below, that no familial relationships exist between the owner(s) or any employees of Ino-Tek, Inc. and any member of the City of Troy City Council or City of Troy management.

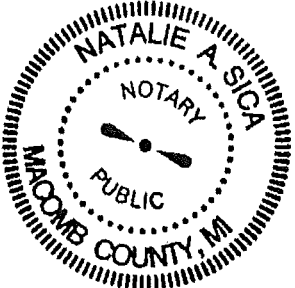
**List any Familial Relationships:** None

BIDDER:  
Ino-Tek, Inc.  
By: [Signature]  
Its: Vice President

STATE OF MICHIGAN )  
 )ss.  
COUNTY OF Macomb )

This instrument was acknowledged before me on the 4<sup>th</sup> day of September, 2020, by  
Steven J. McCarthy

[Signature]



NATALIE A. SICA  
Notary Public, State of Michigan  
County of Macomb  
My Commission Expires Jun. 10, 2027  
Acting in the County of macomb

# SAFETY DATA SHEET

**Airgas**  
an Air Liquide company

Nonflammable Gas Mixture: Nitrogen / Nitrogen Dioxide / Oxygen

## Section 1. Identification

GHS product identifier : Nonflammable Gas Mixture: Nitrogen / Nitrogen Dioxide / Oxygen  
Other means of identification : Not available.  
Product type : Gas.  
Product use : Synthetic/Analytical chemistry.  
SDS # : 012807  
Supplier's details : Airgas USA, LLC and its affiliates  
259 North Radnor-Chester Road  
Suite 100  
Radnor, PA 19087-5283  
1-610-687-5253  
24-hour telephone : 1-866-734-3438

## Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
Classification of the substance or mixture : GASES UNDER PRESSURE - Compressed gas

### GHS label elements

Hazard pictograms :



Signal word : Warning  
Hazard statements : Contains gas under pressure; may explode if heated.

### Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.  
Prevention : Not applicable.  
Response : Not applicable.  
Storage : Protect from sunlight. Store in a well-ventilated place.  
Disposal : Not applicable.  
Hazards not otherwise classified : None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
Other means of identification : Not available.  
Product code : 012807

### Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Nitrogen	76.21 - 80.5	7727-37-9
oxygen	19.5 - 23.5	7782-44-7
nitrogen dioxide	0.0000001 - 0.2874	10102-44-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : As this product is a gas, refer to the inhalation section.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : As this product is a gas, refer to the inhalation section.

##### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.  
Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Nitrogen	ACGIH TLV (United States, 3/2017). Oxygen Depletion [Asphyxiant]. None.
oxygen	ACGIH TLV (United States, 6/2013). STEL: 9.4 mg/m <sup>3</sup> 15 minutes.
nitrogen dioxide	STEL: 5 ppm 15 minutes. TWA: 5.6 mg/m <sup>3</sup> 8 hours. TWA: 0.2 ppm 8 hours. NIOSH REL (United States, 4/2013). STEL: 1.8 mg/m <sup>3</sup> 15 minutes. STEL: 1 ppm 15 minutes. OSHA PEL (United States, 2/2013). CEIL: 9 mg/m <sup>3</sup> CEIL: 5 ppm OSHA PEL 1989 (United States, 3/1989). STEL: 1.8 mg/m <sup>3</sup> 15 minutes. STEL: 1 ppm 15 minutes.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Gas.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : -210.01°C (-346°F) This is based on data for the following ingredient: nitrogen.  
Weighted average: -211.91°C (-349.4°F)
- Boiling point** : Not available.
- Critical temperature** : Lowest known value: -146.95°C (-232.5°F) (nitrogen).
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Highest known value: 1.1 (Air = 1) (oxygen). Weighted average: 1 (Air = 1)
- Gas Density (lb/ft<sup>3</sup>)** : Weighted average: 0.07
- Relative density** : Not applicable.
- Solubility** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.
- Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.

## Section 10. Stability and reactivity

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/Ingredient name	Result	Species	Dose	Exposure
nitrogen dioxide	LC50 Inhalation Gas.	Rat	115 ppm	1 hours

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.  
**Ingestion** : As this product is a gas, refer to the inhalation section.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

## Section 11. Toxicological information

### Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

### Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

### Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/Ingredient name	Result	Species	Exposure
nitrogen dioxide	Acute LC50 8640 µg/l Fresh water	Crustaceans - Macrobrachium rosenbergii	48 hours
	Acute LC50 19600 µg/l Fresh water	Fish - Tinca tinca - Larvae	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/Ingredient name	LogP <sub>ow</sub>	BCF	Potential
Nitrogen oxygen	0.67	-	low
	0.65	-	low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.






Other adverse effects : No known significant effects or critical hazards.



### Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

### Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1956	UN1956	UN1956	UN1956	UN1956
UN proper shipping name	COMPRESSED GAS, N.O.S.(Air, Nitrogen Dioxide)	COMPRESSED GAS, N.O.S.(Air, Nitrogen Dioxide)	COMPRESSED GAS, N.O.S.(Air, Nitrogen Dioxide)	COMPRESSED GAS, N.O.S.(Air, Nitrogen Dioxide)	COMPRESSED GAS, N.O.S.(Air, Nitrogen Dioxide)
Transport hazard class(es)	2.2 	2.2 	2.2 	2.2 	2.2 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

**Additional information**

**DOT Classification** : **Reportable quantity** 3479.5 lbs / 1579.7 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  
Explosive Limit and Limited Quantity Index 0.125  
Passenger Carrying Road or Rail Index 75

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

### Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
Clean Water Act (CWA) 311: nitrogen dioxide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

## Section 15. Regulatory information

Clean Air Act Section 602 : Not listed  
Class I Substances

Clean Air Act Section 602 : Not listed  
Class II Substances

DEA List I Chemicals : Not listed  
(Precursor Chemicals)

DEA List II Chemicals : Not listed  
(Essential Chemicals)

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
nitrogen dioxide	0.0000001 - 0.2874	Yes.	100	-	10	-

SARA 304 RQ : 3479.5 lbs / 1579.7 kg

### SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

### State regulations

Massachusetts : The following components are listed: OXYGEN (LIQUID); NITROGEN; NITROGEN (LIQUIFIED)

New York : None of the components are listed.

New Jersey : The following components are listed: OXYGEN; NITROGEN

Pennsylvania : The following components are listed: OXYGEN; NITROGEN

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

Australia : All components are listed or exempted.  
Canada : All components are listed or exempted.  
China : All components are listed or exempted.  
Europe : All components are listed or exempted.  
Japan : Japan inventory (ENCS): Not determined.  
Japan inventory (ISHL): Not determined.  
Malaysia : Not determined.  
New Zealand : All components are listed or exempted.  
Philippines : All components are listed or exempted.  
Republic of Korea : All components are listed or exempted.  
Taiwan : All components are listed or exempted.  
Thailand : Not determined.

## Section 15. Regulatory information

Turkey : Not determined.  
 United States : All components are listed or exempted.  
 Viet Nam : Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	/	1
Flammability		0
Physical hazards		3

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

Classification	Justification
GASES UNDER PRESSURE - Compressed gas	On basis of test data

### History

Date of printing : 1/16/2018  
 Date of issue/Date of revision : 1/16/2018  
 Date of previous issue : 6/7/2016  
 Version : 0.04

### Key to abbreviations

ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

References : Not available.

## Section 16. Other information

✔ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# SAFETY DATA SHEET

**Airgas.**  
an Air Liquide company

Nonflammable Gas Mixture: Carbon Monoxide 1ppb-999ppm / Nitrogen 99.9001-99.9999%

## Section 1. Identification

**GHS product identifier** : Nonflammable Gas Mixture: Carbon Monoxide 1ppb-999ppm / Nitrogen 99.9001-99.9999%

**Other means of identification** : Not available.

**Product type** : Gas.

**Product use** : Synthetic/Analytical chemistry.

**SDS #** : 012607

**Supplier's details** : Airgas USA, LLC and its affiliates  
259 North Radnor-Chester Road  
Suite 100  
Radnor, PA 19087-5283  
1-610-687-5253

**24-hour telephone** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : GASES UNDER PRESSURE - Compressed gas

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Contains gas under pressure; may explode if heated.  
May displace oxygen and cause rapid suffocation.

### Precautionary statements

**General** : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Protect from sunlight. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

### Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
 Other means of identification : Not available.  
 Product code : 012607

Ingredient name	%	CAS number
Nitrogen	99.9 - 99.999	7727-37-9
carbon monoxide	0.0000001 - 0.0999	630-08-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : As this product is a gas, refer to the inhalation section.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : As this product is a gas, refer to the Inhalation section.

##### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.  
Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous.

## Section 7. Handling and storage

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Nitrogen	ACGIH TLV (United States, 3/2017). Oxygen Depletion [Asphyxiant].
carbon monoxide	California PEL for Chemical Contaminants (Table AC-1) (United States). PEL: 25 ppm 8 hours. CEIL: 200 ppm ACGIH TLV (United States, 3/2017). TWA: 25 ppm 8 hours. TWA: 29 mg/m <sup>3</sup> 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 35 ppm 8 hours. TWA: 40 mg/m <sup>3</sup> 8 hours. CEIL: 200 ppm CEIL: 229 mg/m <sup>3</sup> NIOSH REL (United States, 10/2016). TWA: 35 ppm 10 hours. TWA: 40 mg/m <sup>3</sup> 10 hours. CEIL: 200 ppm CEIL: 229 mg/m <sup>3</sup> OSHA PEL (United States, 6/2016). TWA: 50 ppm 8 hours. TWA: 55 mg/m <sup>3</sup> 8 hours.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.



## Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Gas.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : -210.01°C (-346°F) This is based on data for the following ingredient: nitrogen.
- Boiling point** : Not available.
- Critical temperature** : Lowest known value: -146.95°C (-232.5°F) (nitrogen).
- Flash point** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Highest known value: 0.97 (Air = 1) (nitrogen).
- Gas Density (lb/ft<sup>3</sup>)** : Only known value: 0.072 (nitrogen).
- Relative density** : Not applicable.
- Solubility** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.
- Flow time (ISO 2431)** : Not available.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
carbon monoxide	LC50 Inhalation Gas.	Rat	3760 ppm	1 hours

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
carbon monoxide	Category 1	Not determined	Not determined

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

## Section 11. Toxicological information

### Potential acute health effects

- Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.  
**Ingestion** : As this product is a gas, refer to the inhalation section.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Nitrogen	0.67	-	low

### Mobility in soil

## Section 12. Ecological information






Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1956	UN1956	UN1956	UN1956	UN1956
UN proper shipping name	COMPRESSED GAS, N.O.S. (nitrogen, carbon monoxide)	COMPRESSED GAS, N.O.S. (nitrogen, carbon monoxide)	COMPRESSED GAS, N.O.S. (nitrogen, carbon monoxide)	COMPRESSED GAS, N.O.S. (nitrogen, carbon monoxide)	COMPRESSED GAS, N.O.S. (nitrogen, carbon monoxide)
Transport hazard class(es)	2.2 	2.2 	2.2 	2.2 	2.2 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

### Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  
Explosive Limit and Limited Quantity Index 0.125  
Passenger Carrying Road or Rail Index 75

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

## Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112 : Not listed  
(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed  
Class I Substances

Clean Air Act Section 602 : Not listed  
Class II Substances

DEA List I Chemicals : Not listed  
(Precursor Chemicals)

DEA List II Chemicals : Not listed  
(Essential Chemicals)

### SARA 302/304

#### Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

### SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

### State regulations

Massachusetts : The following components are listed: NITROGEN; NITROGEN (LIQUIFIED)

New York : None of the components are listed.

New Jersey : The following components are listed: NITROGEN

Pennsylvania : The following components are listed: NITROGEN

### California Prop. 65

**⚠ WARNING:** This product can expose you to Carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Ingredient name	No significant risk level	Maximum acceptable dosage level
Carbon monoxide	-	-

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

## Section 15. Regulatory information

Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: All components are listed or exempted.
Viet Nam	: Not determined.

## Section 16. Other information

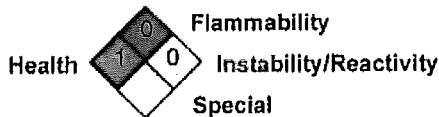
### Hazardous Material Information System (U.S.A.)

Health	/ 1
Flammability	0
Physical hazards	3

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

Classification	Justification
GASES UNDER PRESSURE - Compressed gas	On basis of test data

### History

Date of printing	: 1/16/2018
Date of issue/Date of revision	: 1/16/2018
Date of previous issue	: 6/12/2017
Version	: 0.03

## Section 16. Other information

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973  
as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

**References** : Not available.

☑ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



**Gas Detection & Hazardous Materials Emergency Alarm Systems**

P.O. Box 502 / Romeo, Michigan 48065-0502

586-336-0856 / Fax: 586-336-0863

www.ino-tek.com

Wednesday, September 9, 2020

**Gas Detection System  
City of Troy Department of Public Works  
Maintenance Garage  
4693 Rochester Road  
Troy, MI 48085**

This is our  
**Quotation / Scope of Work**  
**Ino-Tek Quotation #Q20-8189**

**Subject: City of Troy - Gas Detection System; Bid Document ITB-COT 21-08  
Streets Garage, Fleet Maintenance Garage, and Water Equipment Garage**

Per the bid document ITB-COT 21-08; ~~Ino-Tek~~ is pleased to provide the following QUOTATION for the above subject project.

- 1) **System Content.** This Life Safety System for monitoring of hazardous materials includes the following: System Main Control, Relay Panel(s), SafeAir Battery Back Up System, NO2/CO Gas Sensors/Transmitters, Audible / Visual Alarm Notification Devices with Signs, Interlocks for Ventilation Equipment and the Fire Alarm Control Panel as required for a complete Michigan Building Code / OSHA compliant system. System operation shall comply with Michigan Building Code MBC-2015 / International Fire Code IFC-2015/ Michigan Mechanical Code MMC-2015 / OSHA / NFPA requirements. Includes detailed system design drawings, submittal package for Owner Safety and AHJ Approval, field devices, system installation (By INO-TEK), permits (By INO-TEK), system start up, commissioning, AHJ acceptance testing, owner training, and one year quarterly calibrations with annual certification.
- 2) **Electrical Installation BY INO-TEK.** Electrical Installation BY INO-TEK includes complete system electrical installation of all devices supplied by Ino-Tek including: control panels and field equipment as noted in this document. All circuit breaker locks, conduits, wire, brackets, hangars, installation permit, and interlock to other equipment (as noted in this document), as required for a complete electrical installation, are BY INO-TEK. See our Note #3 below for additional Electrical Installation BY INO-TEK.
- 3) **Fire Alarm System Interface – Installation BY INO-TEK.** The MBC and NFPA require that this system interlock to the local Fire Alarm Control Panel (FACP). Relay contacts required for this interlock are located within our Control Panel. **NOTE:** The Fire Alarm Contractor will provide the appropriate alarm input modules in the FACP and is included in the pricing. The electrical installation contractor will pull the appropriate wire to the FACP; final termination of these wires at the FACP is BY INO-TEK. The FACP will receive two (2) relay contacts; one (1) for system trouble and one (1) for system danger alarm. All FACP hardware, installation, programming, updated drawings, and start up are BY INO-TEK. Commissioning will be provided by Ino-Tek during our time on site for start up, commissioning and acceptance testing.
- 4) **Gas Detection System Warranty.** This quotation includes a one-year system warranty and maintenance. Quarterly calibrations and one annual certification included in pricing.





**Scope of Work**

<b><u>Item</u></b>	<b><u>Qty.</u></b>	<b><u>System Description / Breakdown</u></b>	
<b>1A</b>	<b>Lot</b>	<p><b><u>Control Panels &amp; Field Material, Including:</u></b></p> <ul style="list-style-type: none"> <li>• (1) Main Alarm System Control Panel; CO / NO2 Danger and Fault Alarms.</li> <li>• (3) Relay Panels.</li> <li>• (7) Two (2) Position Selector Switches.</li> <li>• (1) Emergency Power Battery Back Up System Panel.</li> <li>• (9) Carbon Monoxide Gas Detection Sensor / Transmitter.</li> <li>• (9) Nitrogen Dioxide Gas Detection Sensor / Transmitter.</li> <li>• (Lot) Interlocks for ventilation.</li> <li>• (7) Audible and Visual Alarm Notification Devices.</li> <li>• (7) Warning Signs and Device tags.</li> <li>• One (1) Year Equipment Warranty.</li> <li>• Freight to Jobsite.</li> </ul>	<b><i>Included</i></b>
<b>1B</b>	<b>Lot</b>	<p><b><u>System Design, Engineering &amp; Documentation / Project Management; Including:</u></b></p> <ul style="list-style-type: none"> <li>• System Project Management / Site Meetings</li> <li>• Engineering, Design and AutoCAD Documentation required for submittal.</li> <li>• Documentation; (3) copies will be submitted for approval. Package includes: <ul style="list-style-type: none"> <li>• Hazard Analysis Review and Code Documentation</li> <li>• Product Data</li> <li>• Emergency Power Load Calculation Data</li> <li>• Electrical Schematic Ladder Wiring Diagrams</li> <li>• Control Panel and Field Detail Wiring Diagrams</li> <li>• Hardware Details &amp; Software Configurations</li> <li>• Interface Panel Layout &amp; Bill of Materials</li> <li>• Plan Layout</li> <li>• Sequence of Operations</li> <li>• Electrical Riser Diagrams</li> <li>• Tag and Sign Information</li> <li>• Conduit and Cable Schedules</li> </ul> </li> <li>• As Built Drawings</li> </ul>	<b><i>Included</i></b>
<b>1C</b>	<b>Lot</b>	<p><b><u>Field Quality Control – Testing &amp; Acceptance; Including:</u></b></p> <ul style="list-style-type: none"> <li>• Factory trained representative to program, start up, test and calibrate, set alarm threshold levels, verify system operation.</li> <li>• AHJ Acceptance Testing.</li> <li>• Permanent Site Record information.</li> <li>• Owner Training On-site.</li> <li>• (3) Copies of Operation and Maintenance Data.</li> </ul>	<b><i>Included</i></b>
<b>1D</b>	<b>Lot</b>	<p><b><u>Electrical Installation BY INO-TEK; Including:</u></b></p> <ul style="list-style-type: none"> <li>• Permits: Electrical Installation / Fire Inspection as required.</li> <li>• Installation of control panels and field devices.</li> <li>• Installation material including all conduits, tubing, wire, mounting brackets, etc. as required for complete installation.</li> <li>• Final terminations and interlocks to fire alarm panels as noted.</li> </ul>	<b><i>Included</i></b>

<u>Item</u>	<u>Qty.</u>	<u>System Description / Breakdown</u>	
1E	Lot	<u>Fire Alarm System Interface; Including:</u> <ul style="list-style-type: none"> <li>• Provide trouble and danger level alarms to the FACP.</li> </ul>	<i>Included</i>
1F	Lot	<u>Warranty Period Inspection &amp; Servicing; Including:</u> <ul style="list-style-type: none"> <li>• One (1) Year Quarterly Sensor Calibration Service and Reports; (4) Site Visits.</li> <li>• One (1) Year - Annual Inspection, re-Certification and Testing.</li> <li>• Includes all calibration gases, travel expenses to and from the jobsite.</li> </ul>	<i>Included</i>

**Terms and Conditions**

- **Submittals:** Shop drawing and submittal package delivery is 2 - 4 weeks after receipt of PO. Equipment can be submitted upon early if desired; 2 weeks after receipt of PO
- **Delivery:** Equipment delivery is 4 - 6 weeks after receipt of Purchase Order or approval.
- **Installation:** By INO-TEK. Minimum one (1) week lead-time required to schedule system start up after installation is complete.
- **Invoicing:** 50% Upon Delivery of Equipment, 40% After Completion of Installation, and 10% After Final Testing. NET 30.
- **FOB:** Jobsite.
- **Warranty:** 1-Year Equipment Warranty. See Item 1F above.

If you have any questions or require any additional information; please feel free to contact me.

Sincerely,

*Kristina Bales*

Kristina Bales  
Kristina.Bales@Ino-Tek.com

**Ino-Tek**

Cell: (248) 212-7578



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Thursday, September 10, 2020

**Gas Detection System  
City of Troy Department of Public Works  
Maintenance Garage**  
4693 Rochester Road  
Troy, MI 48085

*This is our*  
**Quotation / Scope of Work**  
**Ino-Tek Quotation #Q20-8189**

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- 4) **Gas Detection System Warranty.** This quotation includes a one-year system warranty and maintenance. Quarterly calibrations and one annual certification included in pricing.

### Quotation

<u>Item</u>	<u>Qty.</u>	<u>System Description</u>	<u>Price</u>
1	Lot	<p><b><u>Base Bid: Streets Equipment Garage, Fleet Maintenance, and Water Equipment Garage - Gas Detection System.</u></b></p> <p>Meets the requirements of Michigan Building Code as noted in this quotation document and the specifications issued with ITB-COT 21-08.</p> <p>Includes each item as listed below:</p> <ul style="list-style-type: none"><li>• Item 1A; Control Panels &amp; Field Material.</li><li>• Item 1B; System Design, Engineering &amp; Documentation.</li><li>• Item 1C; Testing &amp; Acceptance.</li><li>• Item 1D; System Installation.</li><li>• Item 1E; Fire Alarm System Interface.</li><li>• Item 1F; Warranty Period Inspection &amp; Servicing.</li><li>• Bonding as Required.</li></ul>	<p style="text-align: right;"><b>\$64,927</b></p>          <p style="text-align: right;"><b>Total of Items 1A thru 1F Below!</b></p>

**Scope of Work**

<b><u>Item</u></b>	<b><u>Qty.</u></b>	<b><u>System Description / Breakdown</u></b>	
<b>1A</b>	<b>Lot</b>	<p><b><u>Control Panels &amp; Field Material, Including:</u></b></p> <ul style="list-style-type: none"> <li>• (1) Main Alarm System Control Panel; CO / NO2 Danger and Fault Alarms.</li> <li>• (3) Relay Panels.</li> <li>• (7) Two (2) Position Selector Switches.</li> <li>• (1) Emergency Power Battery Back Up System Panel.</li> <li>• (9) Carbon Monoxide Gas Detection Sensor / Transmitter.</li> <li>• (9) Nitrogen Dioxide Gas Detection Sensor / Transmitter.</li> <li>• (Lot) Interlocks for ventilation.</li> <li>• (7) Audible and Visual Alarm Notification Devices.</li> <li>• (7) Warning Signs and Device tags.</li> <li>• One (1) Year Equipment Warranty.</li> <li>• Freight to Jobsite.</li> </ul>	<b><i>Included</i></b>
<b>1B</b>	<b>Lot</b>	<p><b><u>System Design, Engineering &amp; Documentation / Project Management; Including:</u></b></p> <ul style="list-style-type: none"> <li>• System Project Management / Site Meetings</li> <li>• Engineering, Design and AutoCAD Documentation required for submittal.</li> <li>• Documentation; (3) copies will be submitted for approval. Package includes: <ul style="list-style-type: none"> <li>• Hazard Analysis Review and Code Documentation</li> <li>• Product Data</li> <li>• Emergency Power Load Calculation Data</li> <li>• Electrical Schematic Ladder Wiring Diagrams</li> <li>• Control Panel and Field Detail Wiring Diagrams</li> <li>• Hardware Details &amp; Software Configurations</li> <li>• Interface Panel Layout &amp; Bill of Materials</li> <li>• Plan Layout</li> <li>• Sequence of Operations</li> <li>• Electrical Riser Diagrams</li> <li>• Tag and Sign Information</li> <li>• Conduit and Cable Schedules</li> </ul> </li> <li>• As Built Drawings</li> </ul>	<b><i>Included</i></b>
<b>1C</b>	<b>Lot</b>	<p><b><u>Field Quality Control – Testing &amp; Acceptance; Including:</u></b></p> <ul style="list-style-type: none"> <li>• Factory trained representative to program, start up, test and calibrate, set alarm threshold levels, verify system operation.</li> <li>• AHJ Acceptance Testing.</li> <li>• Permanent Site Record information.</li> <li>• Owner Training On-site.</li> <li>• (3) Copies of Operation and Maintenance Data.</li> </ul>	<b><i>Included</i></b>
<b>1D</b>	<b>Lot</b>	<p><b><u>Electrical Installation BY INO-TEK; Including:</u></b></p> <ul style="list-style-type: none"> <li>• Permits: Electrical Installation / Fire Inspection as required.</li> <li>• Installation of control panels and field devices.</li> <li>• Installation material including all conduits, tubing, wire, mounting brackets, etc. as required for complete installation.</li> <li>• Final terminations and interlocks to fire alarm panels as noted.</li> </ul>	<b><i>Included</i></b>

<u>Item</u>	<u>Qty.</u>	<u>System Description / Breakdown</u>	
<b>1E</b>	<b>Lot</b>	<b><u>Fire Alarm System Interface; Including:</u></b> <ul style="list-style-type: none"> <li>• Provide trouble and danger level alarms to the FACP.</li> </ul>	<b>Included</b>
<b>1F</b>	<b>Lot</b>	<b><u>Warranty Period Inspection &amp; Servicing; Including:</u></b> <ul style="list-style-type: none"> <li>• One (1) Year Quarterly Sensor Calibration Service and Reports; (4) Site Visits.</li> <li>• One (1) Year - Annual Inspection, re-Certification and Testing.</li> <li>• Includes all calibration gases, travel expenses to and from the jobsite.</li> </ul>	<b>Included</b>

**Terms and Conditions**

- **Submittals:** Shop drawing and submittal package delivery is 2 - 4 weeks after receipt of PO. Equipment can be submitted upon early if desired; 2 weeks after receipt of PO
- **Delivery:** Equipment delivery is 4 - 6 weeks after receipt of Purchase Order or approval.
- **Installation:** By INO-TEK. Minimum one (1) week lead-time required to schedule system start up after installation is complete.
- **Invoicing:** 50% Upon Delivery of Equipment, 40% After Completion of Installation, and 10% After Final Testing. NET 30.
- **FOB:** Jobsite.
- **Warranty:** 1-Year Equipment Warranty. See Item 1F above.

If you have any questions or require any additional information; please feel free to contact me.

Sincerely,

*Kristina Bales*

Kristina Bales  
 Kristina.Bales@Ino-Tek.com  
  
 Cell: (248) 212-7578



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

Date: September 15, 2020

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Rob Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Kurt Bovensiep, Public Works Director  
Brian Varney, Fleet Operations Manager  
Dennis Trantham, Facilities and Grounds Operations Manager  
MaryBeth Murz, Purchasing Manager

Subject: Standard Purchasing Resolution 2: Award to Low Bidder Meeting Specifications -  
Department of Public Works Gas Detection System

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### History

- The existing Carbon Monoxide System is original to the building circa 1975.
- The air quality in the Emergency Vehicle, Fleet Maintenance Garage, and the Streets Equipment Garage has been monitored for only Carbon Monoxide (CO).
- Carbon Monoxide is an odorless, colorless gas that is found in combustion fumes, such as those produced by cars and trucks and small gasoline engines. CO from these sources can build up in enclosed or semi-enclosed spaces and people in these spaces can be poisoned by breathing it. The most common symptoms of CO poisoning are headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion. High levels of CO inhalation can cause loss of consciousness and death.
- Nitrogen Dioxide (NO<sub>2</sub>) is an off gas of a reddish-brown color with a pungent, acrid odor and is one of a group of highly reactive gasses known as "oxides of nitrogen," or "nitrogen oxides (NO<sub>x</sub>)." NO<sub>2</sub> forms quickly from car, truck and bus emissions. Health effects associated with nitrogen dioxide exposure (NO<sub>2</sub>) include eye, nose, and throat irritation. It may cause impaired lung function and increased respiratory infections in young children. Extremely high-dose exposure to NO<sub>2</sub> may result in pulmonary edema and diffuse lung injury.
- Deficiencies were identified in the Facilities Condition Assessment and Analysis.
- The new system will be integrated with the fire alarm panel and will become a monitored alarm.
- The existing CO detection system has reached the end of its life and is no longer capable of being calibrated as components have become obsolete and is in need of replacement.

### Purchasing

On September 10, 2020, a bid opening was conducted as required by City Charter and Code for the replacement and installation of a Gas Detection System at the Department of Public Works. The bid was posted on the Michigan Inter-governmental Trade Network (MITN) website; [www.mitn.info](http://www.mitn.info). Two (2) bid responses were received. Below is a detailed summary of potential vendors:





500 West Big Beaver  
 Troy, MI 48084  
 troymi.gov

## CITY COUNCIL AGENDA ITEM

### Purchasing (continued)

<b>Companies notified via MITN</b>	130	<p><i>MITN provides a resourceful online platform to streamline the procurement process, reduce costs, and make it easier and more transparent for vendors to do business with the City of Troy.</i></p> <p><b>Active MITN</b> members with a current membership and paying annual dues receive automatic electronic notification which allows instant access to Bids, RFPS and Quote opportunities with the City.</p> <p><b>Active MITN <i>non-paying</i> members</b> are responsible to monitor and check the MITN website for opportunities to do business with the City.</p> <p><b>Inactive MITN member</b> status can occur when a company does not renew their account upon expiration. Inactive members cannot be notified of solicitations or access any bid information.</p>
Troy Companies notified via MITN	4	
Troy Companies - Active email Notification	4	
Troy Companies - Active Free	0	
<b>Companies that viewed the bid</b>	12	
Troy Companies that viewed the bid	0	

- *Ino-Tek, Inc. of Ray, MI*, is the low bidder and meets all bid specifications and is being recommended for the replacement and installation of a Gas Detection System at the Department of Public Works.

### Financial

Funds are budgeted and available in the Public Works Capital Projects Fund under Project Number 2021C0135 for the 2021 fiscal year. Expenditures will be charged to account number 401.464.7675.900.

### Recommendation

City management recommends awarding a contract for the replacement and installation of a Gas Detection System at the Department of Public Works; as per bid specifications to the low bidder meeting specifications *Ino-Tek, Inc. of Ray, MI* at prices contained in the bid tabulation opened September 10, 2020 for an estimated cost of \$64,927 with a 15% contingency of \$9,740 for an estimated grand total amount of \$74,667 not to exceed budgetary limitations.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

9/1/2020

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

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

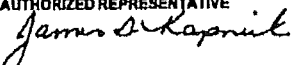
<b>PRODUCER</b> Kapnick Insurance Group 333 Industrial Dr Adrian MI 49221	<b>CONTACT NAME:</b> Catherine Renard <b>PHONE (A/C, No, Ext):</b> 2482081373 <b>FAX (A/C, No):</b> 517-283-8658 <b>E-MAIL ADDRESS:</b> catherine.renard@kapnick.com	
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b> Ino-Tek, Inc. 68950 Powell Rd. Ray MI 48096	<b>INC-INC-01</b>	<b>INSURER A:</b> Everest National Insurance Co. <b>NAIC #</b> 10120
		<b>INSURER B:</b> Frankenmuth Mutual Insurance Company      13986
		<b>INSURER C:</b> Underwriters at Lloyd's London      99998
		<b>INSURER D:</b> Accident Fund Insurance Company of America      10166
		<b>INSURER E:</b>
		<b>INSURER F:</b>

**COVERAGES**      **CERTIFICATE NUMBER: 728977518**      **REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input checked="" type="checkbox"/> OTHER: XCU	Y	Y	EF4ML06112-201	7/9/2020	7/9/2021	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 Pollution Liab \$ INCLUDED
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> AUTOS ONLY	Y	Y	BA 8365210	7/1/2020	7/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE  DED    RETENTION \$			EF4CUO1184-201	7/9/2020	7/9/2021	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$
D	<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WCV6013564	7/1/2020	7/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
C	<input type="checkbox"/> Professional Liability <input type="checkbox"/> Excess Professional			B0621PINOT000320 B0621PINOT000680	7/9/2020 7/9/2020	7/9/2021 7/9/2021	Limit Limit 2,000,000 3,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)**  
 -Primary & Noncontributory form ECG245821114 applies - for ongoing and completed operations for named person with regard to general and pollution liability.  
 -Primary & Noncontributory form ECG245880615 applies - for ongoing and completed operations with regard to general and pollution liability.  
 -Primary & Noncontributory form EUM245710817 applies with regard to excess liability.  
 -Primary & Noncontributory form IL12011185 applies with regard to auto liability.  
 -Blanket Waiver of Subrogation applies with respects to general liability and pollution liability per form ECG245060615 - if there is a written contract  
 -Blanket Waiver of Subrogation applies with respects to excess liability per form EUM245860514 - if there is a written contract  
 -Blanket Waiver of Subrogation applies with respect to auto liability per form IL12011185 - if there is a written contract  
 -Blanket waiver of Subrogation applies with respects to employers liability per form WC000313 - if there is a written contract  
 See Attached...

<b>CERTIFICATE HOLDER</b>  City of Troy Attn: Purchasing Manager 500 W. Big Beaver Road Troy MI 48084	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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**ADDITIONAL REMARKS SCHEDULE**

AGENCY Kapnick Insurance Group		NAMED INSURED Ino-Tek, Inc. 68950 Powell Rd. Ray MI 48096	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

**ADDITIONAL REMARKS**

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,**

**FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE**

- Blanket additional insured (Owners, Lessees, Contractors) applies with respect to general liability per form CG20100704
- Blanket additional insured (Owners, Lessees, Contractors) applies with respect to general liability completed operations per form CG20370704
- Blanket additional insured (Lessor of leased equipment) applies with respect to general liability per form CG205670808
- Blanket additional insured applies with respect to auto liability per form IL12011185 - If there is a written contract

The Certificate Holder is included as an Additional Insured as their interest may appear and will be given a 10 Day Notice of Cancellation. Coverage is Primary and Non-Contributory. All necessary endorsements attached.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
<p>Any person or organization for whom you are performing operations, but only if you have agreed in a written contract to add such person or organization as an additional insured on your the policy for that location or part thereof, provided such a written contract is fully executed prior to an 'occurrence' in which coverage is sought under this policy</p>	<p>Any and all covered locations</p>
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

**B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:**

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
<p>Any owner, lessee or contractor with whom you have agreed, in a written contract, that such person or organization should be added as an additional insured on your policy, provided such written contract is fully executed prior to an "occurrence" in which coverage is sought under this policy.</p>	<p>Any and all of your completed operations.</p>
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>	

**Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**PRIMARY AND NONCONTRIBUTORY PROVISION – YOUR ONGOING AND/OR COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
CONTRACTOR'S POLLUTION LIABILITY COVERAGE PART  
MOTOR VEHICLES POLLUTION LIABILITY COVERAGE PART

Paragraph 4., **Other Insurance of Conditions (Section IV)** is amended by the addition of the following:

If other liability insurance similar to this insurance listing as a Named Insured a person or organization that is:

- a. An owner of real or personal property on which you are performing operations; or
- b. A contractor on whose behalf you are performing operations,

and this policy names those persons or organizations as additional insureds for those operations, then this insurance is primary to that other insurance, and that other insurance shall not contribute to amounts payable under this insurance, for liability arising out of your ongoing and/or completed operations performed for that person or organization under a written contract which requires that this insurance be primary. However, this does not apply if the written contract was not executed prior to the date that your operations for that person or organization commenced.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
CONTRACTORS POLLUTION LIABILITY COVERAGE PART  
MOTOR VEHICLE POLLUTION LIABILITY COVERAGE PART

### **SCHEDULE**

**Name of Person or Organization:** Blanket where required by written contract.

Any person or organization that is:

1. An owner of real or personal property on which you are performing operations, but only at the specific written request by that person or organization to you, and only if that request is made prior to the date your operations for that person or organization commenced; or
2. A contractor on whose behalf you are performing operations, but only at the specific written request by that person or organization to you, and only if that request is made prior to the date your operations for that person or organization commenced.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section IV – CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## ADDITIONAL INSURED – LESSOR OF LEASED EQUIPMENT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

<p><b>Name Of Additional Insured Person(s) Or Organization(s)</b></p> <p>Blanket where required by written contract</p>
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>

- A. **Section II – Who Is An Insured** under the Commercial General Liability Coverage Part is amended to include as an insured the person(s) or organization(s) shown in the Schedule, only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" but only to the extent caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person(s) or organization(s).
- B. The insurance afforded to these additional insureds shall only include the insurance required by the terms of the written agreement and only to the extent that coverage is provided within the terms of this Coverage Part.
- C. The Limits of Insurance afforded to these additional insureds shall be the lesser of the following:
  1. The Limits of Insurance required by the written agreement between the parties; or
  2. The Limits of Insurance provided by this Coverage Part.

- D. With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.
- E. For the purposes of this endorsement, paragraph 4. **Other Insurance** under SECTION IV – **COMMERCIAL GENERAL LIABILITY CONDITIONS** of the Commercial General Liability Coverage Part is replaced by the following:
  - 4. **Other Insurance**  
The insurance afforded to these additional insureds is excess over any other insurance naming an insured whether such insurance is primary, excess, contingent or contributing. This insurance may not be used to satisfy any deductible or self-insured retention amounts an insured may owe as a result of this loss, damage or injury.





INSURER: FRANKENMUTH MUTUAL INSURANCE COMPANY

NAMED INSURED  
INO-TEK INC

POLICY NO.  
BA 6365210

POLICY TERM  
07/01/2020 to 07/01/2021

AGENT NO.  
**0210669**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**Policy Changes**

Policy Change  
Number

<b>POLICY NUMBER</b>  6365210	<b>POLICY CHANGES EFFECTIVE</b>  07/01/2020	<b>COMPANY</b>  FRANKENMUTH INSURANCE COMPANY
<b>NAMED INSURED</b>  INO-TEK, INC		<b>AUTHORIZED REPRESENTATIVE</b>
<b>COVERAGE PARTS AFFECTED</b>  BUSINESS AUTO		
<p style="text-align: center;"><b>CHANGES</b></p> <p>ADDITIONAL INSURED 94160 SHALL READ:          ANY PERSON OR ORGANIZATION FOR WHOM YOU ARE PERFORMING OPERATIONS WHEN YOU AND SUCH PERSON OR ORGANIZATION HAVE AGREED IN WRITING IN A CONTRACT OR AGREEMENT THAT SUCH PERSON OR ORGANIZATION BE ADDED AS AN ADDITIONAL INSURED ON YOUR POLICY BUY ONLY FOR LIABILITY ARISING OUT OF THE NAMED INSURED'S OWNERSHIP, MAINTENANCE OR USE OF COVERED "AUTOS" IN CONNECTION WITH THE CONTRACT OR JOB.</p>		

Authorized Representative Signature



INSURER: FRANKENMUTH MUTUAL INSURANCE COMPANY

NAMED INSURED  
INO-TEK INC

POLICY NO.  
BA 6365210

POLICY TERM  
07/01/2020 to 07/01/2021

AGENT NO.  
**0210669**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**Policy Changes**

Policy Change  
Number

<b>POLICY NUMBER</b>  6365201	<b>POLICY CHANGES EFFECTIVE</b>  07/01/2020	<b>COMPANY</b>  FRANKENMUTH INSURANCE COMPANY
<b>NAMED INSURED</b>  INO-TEK, INC		<b>AUTHORIZED REPRESENTATIVE</b>
<b>COVERAGE PARTS AFFECTED</b>  BUSINESS AUTO		
<p style="text-align: center;"><b>CHANGES</b></p> <p>WAIVER OF SUBROGATION IS GRANTED IN FAVOR OF ANY PERSON OR ORGANIZATION AS PER WRITTEN CONTRACT OR AGREEMENT.</p>		

Authorized Representative Signature



INSURER: FRANKENMUTH MUTUAL INSURANCE COMPANY

NAMED INSURED  
INO-TEK INC

POLICY NO.  
BA 6365210

POLICY TERM  
07/01/2020 to 07/01/2021

AGENT NO.  
**0210669**

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**Policy Changes**

Policy Change  
Number

<b>POLICY NUMBER</b>  6365210	<b>POLICY CHANGES EFFECTIVE</b>  07/01/2020	<b>COMPANY</b>  FRANKENMUTH INSURANCE COMPANY
<b>NAMED INSURED</b>  INO-TEK, INC		<b>AUTHORIZED REPRESENTATIVE</b>
<b>COVERAGE PARTS AFFECTED</b>  BUSINESS AUTO		
<p style="text-align: center;"><b>CHANGES</b></p> PRIMARY AND NONCONTRIBUTORY - OTHER INSURANCE CONDITION FORM IS 15084 (8-15)		

\_\_\_\_\_  
Authorized Representative Signature

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**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

**Schedule**

Any person or organization that you perform work for that is liable for an injury, covered by this policy, that prior to the injury has written contract requiring a waiver of our right to recover from them.

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective  
Insured

Policy No.

Endorsement No.  
Premium \$

Insurance Company

Countersigned by \_\_\_\_\_