

Ref. NO.: SDSC SHAR/LSSF  
PURCHASE/LSSF/2024001  
392

**Liquid Propellant Storage and Servicing  
Systems**


Earth Storable Propellant & Gas Systems



**TENDER SPECIFICATION FOR  
SUPPLY OF 100% PURITY GRADE HYDRAZINE  
HYDRATE (32000KGS)**



**LSSF  
SATISH DHAWAN SPACE CENTRE SHAR  
SRIHARIKOTA 524 124  
INDIAN SPACE RESEARCH ORGANISATION**

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### **SPECIFICATION FOR SUPPLY OF HYDRAZINE HYDRATE**


1. **Scope:** Supply of **Hydrazine Hydrate** to Satish Dhawan Space Centre SHAR, Sriharikota, India as per the specifications and conditions.
2. **Quantity required:** Total 32000Kgs of Hydrazine Hydrate of 100% purity grade to be supplied within 9 months from date of release of Purchase Order in Three batches in HDPE 200kg barrels.
3. **Specification:** The product to be delivered shall comply with the following properties.
4. **Properties of Hydrazine Hydrate-100% Purity grade:**

Sl. No	Specification (% by Weight)	Requirements
1.	Hydrazine	64.0 % (63.4% min)
2.	Water	36.0 %
3.	Sulfate as SO <sub>4</sub>	0.0001% max.
4.	Chloride as Cl	0.0001% max.
5.	Iron as Fe	0.00005% max.
6.	Heavy metals as Pb	0.0001% max.
7.	Non volatile matter	0.005% max.
<b>Physical Properties:</b>		
8.	Density (g/cc)	1.032 Nominal
9.	Boiling Point (°C)	121
10.	Appearance	Colourless & clear

- a) Each spell of consignment sample has to be analyzed for compliance of Chemical and physical properties as per specifications and the report has to be submitted to the purchaser before dispatch.

**5. Dispatch & Delivery:**

- 5.1. **The supplier has to deliver hydrazine hydrate of 32000Kgs of Hydrazine Hydrate of 100% purity grade to be supplied within 9 months from date of**

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**release of Purchase Order in Three batches. Delivery schedule of each batch is as given below. However, party shall deliver each batch after confirmation from the purchaser**

- Batch 1(11MT): Within three months from the date of PO(T1:T0+3Months)
- Batch 2 (11MT): Within six months from the date of PO (T2:T0+6Months)
- Batch 3(10MT) :Within Nine months from the date of PO (T3:T0+9Months)
- Note : T0:date of placement of purchase order

5.2. **P.O. shall be valid for one year from the date of PO**

5.3. The consignment shall be delivered FOR: SDSC SHAR, Sriharikota.

5.4. The supplied lot/batch of Hydrazine Hydrate shall be a **latest or manufactured within 2months of the intimation date.**

5.5. **The shelf life shall be minimum one year from the date of supply.**

5.6. The supplier shall supply the material to SDSC SHAR at his own cost and risk.


5.7. The consignment will be weighed and chemical analysis will be carried out at SDSC SHAR, Sriharikota at our laboratory for acceptance.

5.8. **The total lot will be rejected if it fails to meet the PO specification and the rejected lot shall be taken back by the supplier with their own arrangements.**

5.9. The Hydrazine Hydrate barrels will be unloaded at purchaser's site and the 200kg empty HDPE barrels of previous lots will be returned back to the supplier in the same vehicle. However, the conditioning of empty barrels for further use is not in the scope of the purchaser.

5.10. **MARKING:** The supplier has to mark/indicate the Hydrazine Hydrate Chemical name, Hazard group and safety precautions to be taken in case of any leakage or fire hazard as per the Material Safety Data Sheet (MSDS) on 200 Kg drums/ Barrels.

5.11. **Safety:** Considering the toxic nature of the product, suitable precautionary measures shall be taken during transportation to avoid damage to the containers and leaks to surrounding environment.

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5.12. **Documentation: Each batch of consignment sample has to be analyzed for compliance of Chemical content and physical properties as per specifications and the report has to be submitted to the purchaser before dispatch.**

**6. GENERAL CONDITIONS:**

- 6.1. All correspondences and documents exchanged between the supplier and the Purchaser in relevance to this transaction shall be maintained in strict confidentiality. No details, either direct or indirect, in relevance to this enquiry shall be disclosed to any third party.
- 6.2. Compliance: Point wise compliance to the tender specifications shall be submitted and any deviation from the specification shall be highlighted clearly in the offer. Technical compliance duly filled by the party as per Annexure-I to be submitted along with the offer.
- 6.3. Empty barrels will be returned to the supplier after unloading and party shall reduce the empty barrels cost in total cost while quoting.
- 6.4. The quoted price shall be FOR Sriharikota basis.
- 6.5. After the returning of empty barrels, purchaser will not hold any responsibility for the events / mishaps arise due to the handling/usage of empty barrels without decontamination by the supplier or any other agency to whom the empty barrels are sold by the supplier.
- 6.6. The supplier shall submit the Chemical and physical properties analysis report of Hydrazine Hydrate (HH) along with the offer provided by manufacturer.


**7. Bid/Offer Submission details:**

- 7.1. Supplier shall present the bids on Two-part basis as highlighted below:
  - ✓ **Part-I: Techno-Commercial bid**
  - ✓ **Part-II: Price bid.**
- 7.2. Part-I: Techno-Commercial bid: The tenderer shall necessarily present the following in the techno-commercial bid:
  - 7.2.1. The tenderer shall furnish point-wise **confirmation (Technical Compliance attached in Annexure-II)** for the technical specifications

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given in the enquiry. However, change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification. Suppliers are expected to furnish quotations with best match to all technical conditions.

- 7.2.2. The tenderer shall necessarily furnish the details of previously executed orders. Necessary documentary evidence shall be submitted along with offer as a mandatory requirement. Non-compliance of this requirement shall lead to rejection of the offer.
- 7.2.3. Supplier shall produce previous similar purchase orders (P.O) for supply of Hydrazine Hydrate as a documentary proof without which offer will not be considered.
- 7.2.4. Tenderer need to furnish the details related to commercial terms indicating payment terms, details of bank guarantee in case of advance payments & name of Third-Party Inspection agency proposed etc.
- 7.2.5. The Bidders shall indicate clearly the delivery/time period for supplying the items to SDSC SHAR.
- 7.2.6. **Bidder need to submit unpriced price bid copy (as highlighted below) indicating the description of all the cost elements considered, without indicating the price. Tenderer shall note that indication of price in the techno-commercial bid shall lead to disqualification of bid.**
- 7.2.7. The price bids will be opened only after evaluation and acceptance of the technical bid of the respective tenderer.

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**7.3. Format of Un-Priced Price Bid:**


Sl. No	Item Description	Quantity (Kgs)	Cost/Kg (Rs)	Total Cost (Rs)	Separate Cost mentioned in price bid (YES/NO)
1.	Supply of Hydrazine Hydrate (100% purity grade)	32000	Cost to be indicate only in the price bid	Cost to be indicate only in the price bid	
2.	Taxes (as applicable), if any				

**7.4. Part-II: Price bid indicating the price:**

Price bid should be submitted by the tenderer in the following format with price break up.

Sl. No	Item Description	Quantity (Kgs)	Cost/Kg (Rs)	Total Cost (Rs)
1.	Supply of Hydrazine Hydrate (100% purity grade)	32000		
2.	Taxes (as applicable), if any			

**Bid Evaluation criteria:** Total Landed cost at SDSC SHAR (Basic Cost of each item + Transportation Charges from ex-works to SDSC-SHAR + taxes as applicable) will be the basis for evaluation of offer.

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## 8. Offer Validity:

The validity of the offers / tenders should be 120 days from the date of opening of the tenders. **Tenders with offer validity less than the period mentioned above, will not be considered for evaluation.**

## 9. Taxes and Duties:

### 9.1. GST

As per the notification No. 07/2018 Dt.25.01.2018 issued by MoF, GST rate for consumables used for Launch Vehicles, Satellites and payloads shall be 5%.

### 9.2. Custom Duty:

As per Notification No. 05/2018 CUSTOMS Dtd. 25.01.2018 ISRO is eligible to reduced rate of customs duty @ 10.775% (CD@5%+Surcharge@10%+IGST@5%).

In case of foreign component involved, we will provide Customs Duty Exemption Certificate in case of Import Orders/ imported supplies/ High Sea Sales. In this connection, tenderer has to provide the following.

- a) Please indicate whether your rate is inclusive of this Customs duty @ 10.775% or extra.

## 10. Payment Terms

Our general payment terms are 100% payment within 30 days after receipt, analysis and acceptance of items at purchaser's (SDSC-SHAR, Sriharikota) site of each lot (pro-rata payment).

## 11. Mode of Payment


Bidders can submit the banker details and payments can be made through NEFT/RTGS/ECS through PFMS.

## 12. Liquidated Damages

Since delivery is the essence of this order, LD @ 0.5% per week or part thereof subject to a maximum of 10% for the delayed period of supply of each lot.

## 13. Security Deposit

Security Deposit for 3% of the order value is mandatory. Party shall furnish the Security Deposit in the form of Bank Guarantee from nationalized/scheduled bank

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or by Demand Draft valid till completion of the total delivery period plus sixty days (i.e., 9months +60Days)for faithful execution of the contract.

#### **14. Force Majeure**

Should a part or whole work covered under this purchase order be delayed due to reasons of Force Majeure which shall include legal lockouts, strikes, riots, civil commotion, fire accident, quarantines, epidemic, natural calamities and embargoes the completion period for work, equipment referred to in this agreement shall be extended by a period not in excess of the duration of such Force Majeure. The occurrence shall be notified within reasonable time.

#### **15. Applicable Law and Jurisdiction**


The laws of India shall govern this contract for the time being in force. The Courts of Andhra Pradesh, India only shall have jurisdiction to be with and decide any legal matters or disputes what so ever arising out of the contract.

#### **16. Arbitration**

The Work Order shall be interpreted, construed and governed by the Laws in India. In the event of any dispute(s) and/or difference(s) arising out of or relating to the interpretation and application of the Work Order, such dispute(s) and/or difference(s) shall be settled amicably by mutual consultations of the good Office of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible within 30 days from the date of receipt of written notice of the existence of such dispute(s) and/or difference(s), the unsolved dispute(s) and/or difference(s) shall be referred to the Arbitrators appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Amendment Act, 2015 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre-Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be "English" only.

Services under the Work Order shall be continued by Party during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the Centre (SDSC SHAR) or unless the matter is such the Work Order cannot be possible continued until the decision (whether final or interim) of the Arbitrator is obtained.




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**17. Minimum Qualification criteria:**


- 17.1. Tenderers should have satisfactorily executed the following Supply of Hydrazine Hydrate as per the specification (i.e for 100% purity grade) in the last 3 years ending with **31.03.2024** as per the criteria given below.  
(Note: POs for supply of hydrazine Hydrate with less than 100% purity grade are not acceptable).
- 17.1.1. **Single order of value not less than Rs.130 Lakhs. (or)**
- 17.1.2. **Two orders of value not less than Rs.100 lakhs each. (or)**
- 17.1.3. **Three orders of value not less than Rs.70lakhs each.**
- 17.2. Details of the last five years purchase orders for supply of Hydrazine Hydrate shall be submitted along with offer.
- 17.3. Tenderers should have average annual turnover for the last three years (FY: 2021-22,2022-23&23-24) of **Rs.130 Lakhs.**
- 17.4. **The Bidders shall submit Proof for the turnover as part of offer.**
- 17.5. Latest Solvency certificate form any Nationalized/Scheduled bank shall be submitted for a value of minimum **Rs.70Lakhs.** The Solvency certificate must have been issued during current financial year.
- 17.6. The firm must provide a self-declaration that they have not been black listed by any Govt. Department/PSU.
- 17.7. Technical proposal of the bidder, which is not able to substantiate/satisfy the claims made by it with respect to the technical requirements laid down in tender document, will be summarily rejected.

**18. Bid Evaluation criteria:**

- 18.1. In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Department with reference to the technical specifications. The compliance of Technical Bids would be determined on the basis of the parameters specified in the tender document. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.

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- 18.2. During evaluation, SDSC SHAR may request Bidder for any additional clarification/document on the bid, if required.
- 18.3. Performance of Bidder on similar nature of works executed/ under execution will be taken into consideration before selecting the Bidder for opening his price bid (as per qualification criteria).
- 18.4. The time schedule for completion is given in the Proposal document. Bidder is required to confirm the completion period unconditionally.
- 18.5. SDSC SHAR reserves the right to reject any bid if not meeting the technical/commercial requirements and terms & conditions. Such decisions by the SDSC SHAR shall bear no liability whatsoever consequent upon such decision.
- 18.6. Purchaser reserves the right for evaluation of any bidder by visiting his manufacturing premises towards acceptance of the techno-commercial bid. The decision of the purchaser is final in this regard.


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## Annexure-I


### **Technical Compliance** **(To be submitted by the bidder along with Technical Bid)**

Tenderer shall furnish point-wise confirmation for the following. Change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification.

Sl.No	ISRO Description	Technical Compliance (To be filled by the supplier)
1	Supply of Hydrazine Hydrate to SDSC SHAR, Sriharikota, India as per specifications and conditions.	
2	<b>Purity:</b> a) Hydrazine: 64.0 % (63.4% min) b) Water: 36.0 % c) Sulphate as SO <sub>4</sub> : 0.0001% max. d) Chloride as Cl : 0.0001% max. e) Iron as Fe : 0.00005% max. f) Heavy metals as Pb : 0.0001% max. g) Non-volatile matter : 0.005% max.	
3	<b>Physical Properties:</b> a) Density (g/cc): 1.032 Nominal b) Boiling Point (°C): 121 c) Appearance: Colourless & clear	
4	Each batch of consignment sample has to be analyzed for compliance of Chemical content specifications and the report has to be submitted to the purchaser before dispatch.	
5	Considering the toxic nature of the product, suitable precautionary measures shall be taken during transportation to avoid damage to the containers and leaks to surrounding environment.	
6	Total 32000Kgs of Hydrazine Hydrate of 100% purity grade to be supplied within 9 months from date of release of Purchase Order in three batches However, Prices and P.O. shall be valid for one year from the date of PO	
7	The quoted price shall be FOR Sriharikota basis	
8	The Hydrazine Hydrate barrels will be unloaded at purchaser's site and the 200kg empty HDPE barrels of previous lots will be returned back to the supplier in the same vehicle. However, the conditioning of empty barrels for further use is not in the scope of the purchaser	
9	The supplier shall quote the price of the item considering the cost of the empty barrel reduction.	

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Sl.No	ISRO Description	Technical Compliance (To be filled by the supplier)
10	After the returning of empty barrels, purchaser shall not hold any responsibility for the mishaps arise due to the usage of empty barrels without de-contamination by the supplier or any other agency to whom the empty barrels are sold by the supplier	
11	The consignment will be weighed and chemical analysis will be carried out at SDSC SHAR, Sriharikota at our laboratory for acceptance.	
12	The total lot will be rejected if it fails to meet the PO specification and the rejected lot shall be taken back by the supplier with their own arrangements	
13	Our general payment terms are 100% payment within 30 days after receipt, analysis and acceptance of each batch at purchaser's place (i.e at SDSC-SHAR, Sriharikota)	
14	The supplied lot/batch of Hydrazine Hydrate shall be a latest or manufactured within 2months of the intimation date.	
15	Insurance of materials/ manpower used for transportation shall be arranged by the Supplier only.	
16	<b><i>All correspondences &amp; documents exchanged between the supplier &amp; Purchaser in relevance to this transaction shall be maintained in strict confidential. No details, either direct or indirect, in relevance to this enquiry shall be disclosed to any third party.</i></b>	
17	Supplier has to bring out the deviations with reference to specifications & general conditions, if any, clearly indicating proposed changes in the offer.	
18	Total Landed cost at SDSC SHAR (Basic Cost of each item + Transportation Charges from ex-works to SDSC-SHAR + taxes as applicable) will be the basis for evaluation of offer.	
19	Delivery schedule of each batch is as given below. <b>However, party shall deliver each batch after confirmation from the purchaser</b> Batch 1(11MT): Within three months from the date of PO(T1:T0+3Months) Batch 2 (11MT): Within six months from the date of PO (T2:T0+6Months) Batch 3(10MT) Within Nine months from the date of PO (T3:T0+9Months) <b>Note : T0:date of placement of purchase order</b>	

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Sl.No	ISRO Description	Technical Compliance (To be filled by the supplier)
20	As per the notification No. 07/2018 Dt.25.01.2018 issued by MoF, GST rate for consumables used for Launch Vehicles, Satellites and payloads shall be 5%. Party shall confirm GST of 5% is only considered	
21	In case of foreign component involved,As per Notification No. 05/2018 CUSTOMS Dtd. 25.01.2018 ISRO is eligible to reduced rate of customs duty @ 10.775% (CD@5%+Surcharge@10%+IGST@5%).	
22	Indicate whether your rate is inclusive of this Customs duty or extra. @ 10.775%	
23	Party shall submit all the proofs as per the serial number 17(minimum qualification criteria) of attached specifications	
24	Party shall submit the source of supply or details of the manufacturer for 100% purity grade. Analysis certificate of 100% purity grade source or manufacturer of previous supply shall be submitted along with the offer without which offer will not be valid.	