SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers
Product name: N-(2,4-Dinitrophenyl)-L-serine
Product code: D1037

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Reagents

1.3 Details of the supplier of the safety data sheet
Supplier:
TCI Chemicals (India) Pvt. Ltd.
Plot No. B-28, Phase II,
5th Cross Street, MEPZ-SEZ, Tambaram,
Chennai, Tamilnadu - 600045
India
Telephone: +91-44-2262 0909

1.4 Emergency telephone number:
+91-44-2262 0909

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
PHYSICAL HAZARDS
Flammable solids Category 1

HEALTH HAZARDS Not classified

ENVIRONMENTAL HAZARDS Not classified

2.2 Label elements
Pictograms or hazard symbols

Signal word Danger
Hazard statements H228-Flammable solid.
Precautionary statements [Prevention]
P210-Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P241-Use explosion-proof electrical/ventilating/lighting equipment.
P280-Wear protective gloves/eye protection/face protection.

SECTION 3: Composition/information on ingredients

3.1 Substances
Components: N-(2,4-Dinitrophenyl)-L-serine
Percent: >98.0%(HPLC)(T)
CAS Number: 1655-64-7
EC-No: 216-745-1
Synonyms: N-Dnp-L-serine , Dnp-Ser-OH
Chemical Formula: C9H9N3O7

SECTION 4: First aid measures

4.1 Description of first aid measures
Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Ingestion: Get medical advice/attention if you feel unwell. Rinse mouth.
Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed
No data available

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures
5.1 Extinguishing media
Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

5.3 Advice for firefighters
Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

6.2 Environmental precautions
Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up
Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage
7.1 Precautions for safe handling
Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away from heat/sparks/open flame/hot surfaces. No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and face before breaks and immediately after handling the product. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed. Store in a cool and dark place. Be sure not to give the container unexpected impacts, such as falling down or falling off. Store away from incompatible materials such as oxidizing agents.

7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection
8.1 Control parameters
No data available

8.2 Exposure controls
Install a closed system or local exhaust. Also install safety shower and eye bath.

Respiratory protection: Dust respirator. Follow local and national regulations.
Hand protection: Protective gloves.
Eye protection: Safety glasses. A face-shield, if the situation requires.
Skin and body protection: Protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties
Physical state (20°C): Solid
Form: Crystal- Powder
Colour: Pale yellow - Yellow
Odour: No data available
pH: No data available
Melting point/freezing point: 177°C
Boiling point/range: No data available
Flash point: No data available (Calculated value:>60°C)
Flammability or explosive limits: Lower: No data available
SECTION 9: Physical and chemical properties

Upper: No data available
Relative density: No data available
Solubility(ies):
  [Water] No data available
  [Other solvents] No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Dynamic Viscosity: No data available
Kinematic viscosity: No data available

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available
10.2 Chemical stability Stable under proper conditions.
10.3 Possibility of hazardous reactions May explosively decompose on heating, shock, friction, etc.
10.4 Conditions to avoid Heat, Spark, Open flame, Static discharge, Shock, Friction
10.5 Incompatible materials Oxidizing agents
10.6 Hazardous decomposition products Carbon monoxide, Carbon dioxide, Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute Toxicity:
Skin corrosion/irritation:
Serious eye damage/irritation:
Germ cell mutagenicity:
Carcinogenicity:
Reproductive toxicity:

*We judged that this product was not classified into Class6.1 Toxic Substance of current edition of IATA Dangerous Goods Regulations(DGR) according to acute toxicity values and/or Quantitative Structure-Activity Relationship(QSAR).

SECTION 12: Ecological information

12.1 Toxicity
Fish: No data available
Crustacea: No data available
Algae: No data available
12.2 Persistence and degradability No data available
12.3 Bioaccumulative potential No data available
12.4 Mobility in soil
Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law constant(PaM3/mol): No data available
12.5 Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information

14.1 UN number 1325
14.2 UN proper shipping name
SECTION 14: Transport information

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<thead>
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<th>IMDG/IMO</th>
<th>ICAO/IATA</th>
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<td>Flammable solid, organic, n.o.s.</td>
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14.3 Transport hazard class(es)

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14.4 Packaging group

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14.5 Environmental hazards

| Marine pollutant | - |

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006

Not listed

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

Prepared by: TCI Chemicals (India) Pvt. Ltd.
Issue date: 07/30/2015

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.