<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1</strong></td>
<td><strong>Product identifiers</strong></td>
</tr>
<tr>
<td>Product name</td>
<td>Dicyandiamide</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>461-58-5</td>
</tr>
<tr>
<td><strong>1.2</strong></td>
<td><strong>Relevant identified uses of the substance or mixture and uses advised against</strong></td>
</tr>
<tr>
<td>Identified uses</td>
<td>Laboratory chemicals, Industrial &amp; for professional use only.</td>
</tr>
<tr>
<td><strong>1.3</strong></td>
<td><strong>Details of the supplier of the safety data sheet</strong></td>
</tr>
<tr>
<td>Company</td>
<td>Central Drug House (P) Ltd 7/28 Vardaan House New Delhi -110002 INDIA</td>
</tr>
<tr>
<td>Telephone</td>
<td>+91 11 49404040</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a></td>
</tr>
<tr>
<td><strong>1.4</strong></td>
<td><strong>Emergency telephone number</strong></td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>+91 11 49404040 (9:00am - 6:00 pm) [Office hours]</td>
</tr>
<tr>
<td><strong>2.1</strong></td>
<td><strong>Classification of the substance or mixture</strong></td>
</tr>
<tr>
<td>Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.</td>
<td></td>
</tr>
<tr>
<td><strong>2.2</strong></td>
<td><strong>Label elements</strong></td>
</tr>
<tr>
<td>Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.</td>
<td></td>
</tr>
<tr>
<td><strong>2.3</strong></td>
<td><strong>Other hazards</strong></td>
</tr>
<tr>
<td>This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.</td>
<td></td>
</tr>
<tr>
<td><strong>3.1</strong></td>
<td><strong>Substances</strong></td>
</tr>
<tr>
<td>Synonyms</td>
<td>Dicyanodiamide Cyanoguanidine</td>
</tr>
<tr>
<td>Formula</td>
<td>C$_2$H$_4$N$_4$</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>84.08 g/mol</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>461-58-5</td>
</tr>
<tr>
<td>EC-No.</td>
<td>207-312-8</td>
</tr>
</tbody>
</table>
No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

5.2 Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NOₓ)

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Combustible Solids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: powder
Colour: white

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point Melting point/range: 208 - 211 °C - lit.

f) Initial boiling point and boiling range No data available

g) Flash point No data available

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available
j) Upper/lower flammability or explosive limits
   No data available
k) Vapour pressure
   No data available
l) Vapour density
   No data available
m) Relative density
   1.400 g/cm3 at 20 °C
n) Water solubility
   No data available
o) Partition coefficient: n-octanol/water
   No data available
p) Auto-ignition temperature
   No data available
q) Decomposition temperature
   No data available
r) Viscosity
   No data available
s) Explosive properties
   No data available
t) Oxidizing properties
   No data available

9.2 Other safety information
   Bulk density
   0.40 - 0.60 g/l

SECTION 10: Stability and reactivity

10.1 Reactivity
   No data available

10.2 Chemical stability
   Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
   No data available

10.4 Conditions to avoid
   No data available

10.5 Incompatible materials
   Strong acids, Strong bases

10.6 Hazardous decomposition products
   Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available
   In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects
   Acute toxicity
   LD50 Oral - Mouse - > 10,000 mg/kg(Cyanoguanidine)
   LD50 Dermal - Rabbit - > 2,000 mg/kg(Cyanoguanidine)
   Skin corrosion/irritation
   No data available(Cyanoguanidine)
   Serious eye damage/eye irritation
   No data available(Cyanoguanidine)
Respiratory or skin sensitisation
No data available(Cyanoguanidine)

Germ cell mutagenicity
No data available(Cyanoguanidine)

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available(Cyanoguanidine)

Specific target organ toxicity - single exposure
No data available(Cyanoguanidine)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available(Cyanoguanidine)

Additional Information
RTECS: ME9950000

Absorption into the body leads to the formation of methemoglobin which in delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Cyanoguanidine)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish LC50 - Oncorhyncus mykiss (rainbow trout) - 7,700 mg/l - 96 h(Cyanoguanidine)

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 3,177 mg/l - 48 h(Cyanoguanidine)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available(Cyanoguanidine)

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging
Dispose of as unused product.
SECTION 14: Transport information

14.1 UN number
ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -

14.4 Packaging group
ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no

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
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.