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

1.1 Product identifiers
Product name: Nitro Cellulose

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet
Company: Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi-10002
INDIA
Telephone: +91 11 49404040
Email: care@cdhfinechemical.com

1.4 Emergency telephone number
Emergency Phone #: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 3), H226
For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC
R10
R66
For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word: Warning
Hazard statement(s): Flammable liquid and vapour.
Precautionary statement(s): none
Supplemental Hazard information (EU): Repeated exposure may cause skin dryness or cracking.

Hazard symbol(s)  none
R-phrase(s)  
R10  Flammable.
R66  Repeated exposure may cause skin dryness or cracking.
S-phrase(s)  none

2.3  Other hazards - none

SECTION 3: Composition/information on ingredients

3.2  Mixtures
Chemical characterization : Natural product
Synonyms : Cellulose nitrate

Hazardous ingredients according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentyl acetate***</td>
<td>Flam. Liq. 3; Aquatic Chronic</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>628-63-7</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>211-047-3</td>
<td>3; H226, H412, EUH066</td>
</tr>
<tr>
<td>Index-No.</td>
<td>607-130-00-2</td>
<td></td>
</tr>
</tbody>
</table>

Hazardous ingredients according to Directive 1999/45/EC

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentyl acetate</td>
<td>R10 - R66</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>628-63-7</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>211-047-3</td>
<td></td>
</tr>
<tr>
<td>Index-No.</td>
<td>607-130-00-2</td>
<td></td>
</tr>
</tbody>
</table>

* PBT substance, ** vPvB substance, *** WEL substance

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

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  
Do NOT induce vomiting. 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 fire fighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Light sensitive.

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Components with workplace 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
Face shield and safety glasses 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
Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid
b) Odour no data available
c) Odour Threshold no data available
d) pH no data available
e) Melting point/freezing point no data available
f) Initial boiling point and boiling range no data available
g) Flash point 38 °C
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 no data available
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
no data available
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
Heat, flames and sparks.

10.5 Incompatible materials
no data available

10.6 Hazardous decomposition products
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
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

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

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Additional Information
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity
no data available

12.2 Persistence and degradability
no data available
12.3 Bioaccumulative potential
    no data available

12.4 Mobility in soil
    no data available

12.5 Results of PBT and vPvB assessment
    PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
    Harmful to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
    Product
        Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting
        as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal
        company.
    Contaminated packaging
        Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number
    ADR/RID: 2059        IMDG: 2059    IATA: 2059

14.2 UN proper shipping name
    ADR/RID: NITROCELLULOSE SOLUTION, FLAMMABLE
    IMDG: NITROCELLULOSE SOLUTION, FLAMMABLE
    IATA: Nitrocellulose solution, flammable

14.3 Transport hazard class(es)
    ADR/RID: 3        IMDG: 3    IATA: 3

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

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

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
    no data available

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

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Aquatic Chronic    Chronic aquatic toxicity
  EUH066          Repeated exposure may cause skin dryness or cracking.
Flam. Liq.     Flammable liquids
H226           Flammable liquid and vapour.
H412            Harmful to aquatic life with long lasting effects.
Full text of R-phrases referred to under sections 2 and 3

R10 Flammable.
R66 Repeated exposure may cause skin dryness or cracking.

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.