SECTION 1 – PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: p-Nitro Benzoyl Chloride  
SYNONYM: 4-Nitrobenzoyl chloride  
FORMULA: C7H4ClNO3  
CAS NUMBER: 122-04-3

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CAS NUMBER</th>
<th>PURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Nitro Benzoyl Chloride</td>
<td>122-04-3</td>
<td>100%</td>
</tr>
</tbody>
</table>

SECTION 3- HAZARDS IDENTIFICATION

Emergency Overview
- OSHA Hazards
  - Corrosive
- Other hazards which do not result in classification
  - Lachrymator.

HMIS Classification
- Health Hazard: 3
- Flammability: 1
- Physical hazards: 0

NFPA Rating
- Health Hazard: 3
- Fire: 1
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
- Skin: May be harmful if absorbed through skin. Causes skin burns.
- Eyes: Causes eye burns.
- Ingestion: May be harmful if swallowed. Causes burns.

SECTION 4 – FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 – FIRE FIGHTING MEASURES

Flammable properties
Flash point 102 °C (216 °F) - closed cup
Ignition temperature no data available

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

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Do not let product enter drains.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

SECTION 7- HANDLING AND STORAGE

Handling
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. Moisture sensitive.

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.
Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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).

Hand protection
Handle with gloves.

Eye protection
Safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form crystalline
Colour yellow

Safety data
pH no data available
Melting point 71 - 74 °C (160 - 165 °F)
Boiling point 202 - 205 °C (396 - 401 °F) at 140 hPa (105 mmHg)
Flash point 102 °C (216 °F) - closed cup
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

SECTION 10 – STABILITY AND REACTIVITY DATA

Storage stability
Stable under recommended storage conditions.

Conditions to avoid
Avoid moisture.

Materials to avoid
Water, Alcohols, Oxidizing agents, Strong bases

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas
Material Safety Data Sheet
(p-Nitro Benzoyl Chloride)

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Oral - rat - 5,600 mg/kg

Irritation and corrosion
no data available

Sensitisation
no data available

Chronic exposure
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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity - Mammal - Inhalation
Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).
Paternal Effects: Testes, epididymis, sperm duct.

Signs and Symptoms of Exposure
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Cough, Shortness of breath, Headache, Nausea

Potential Health Effects
Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin May be harmful if absorbed through skin. Causes skin burns.
Eyes Causes eye burns.
Ingestion May be harmful if swallowed. Causes burns.

Additional Information
RTECS: DM6651000

SECTION 12 – ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available

Ecotoxicity effects
no data available

Further information on ecology
no data available
SECTION 13 – DISPOSAL CONSIDERATION

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

SECTION 14 - TRANSPORTATION DATA

DOT (US)
UN-Number: 3261   Class: 8   Packing group: II
Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (4-Nitrobenzoyl chloride)
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN-Number: 3261   Class: 8   Packing group: II   EMS-No: F-A, S-B
Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (4-Nitrobenzoyl chloride)
Marine pollutant: No

IATA
UN-Number: 3261   Class: 8   Packing group: II
Proper shipping name: Corrosive solid, acidic, organic n.o.s. (4-Nitrobenzoyl chloride)

SECTION 15 – REGULATORY INFORMATION

OSHA Hazards
Corrosive

DSL Status
All components of this product are on the Canadian DSL list.

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
4-Nitrobenzoyl chloride   CAS-No. 122-04-3   Revision Date
New Jersey Right To Know Components
4-Nitrobenzoyl chloride     CAS-No. 122-04-3     Revision Date

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16 – OTHER INFORMATION

Disclaimer
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.