Section 1. Product and Company Identification

Product Name: Phenyl Alpha Naphthylamine

CAS Number: 90-30-2

Parchem - fine & specialty chemicals
415 Huguenot Street
New Rochelle, NY 10801
(914) 654-6800 (914) 654-6899
parchem.com info@parchem.com

EMERGENCY RESPONSE NUMBER
CHEMTEL
Toll Free US & Canada: 1 (800) 255-3924
All other Origins: 1 (813) 248-0585
Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture
Acute Toxicity - Oral Category 4
Acute Toxicity - Dermal Category 3
Acute toxicity - Inhalation (Gases) Category 3
Acute toxicity - Inhalation (Vapors) Category 3
Acute toxicity - Inhalation (Dusts/Mists) Category 4
Skin Sensitization Category 1
Carcinogenicity Category 2
Specific target organ toxicity (repeated exposure) Category 2

GHS Label Elements
Pictograms:

Signal word: DANGER

Hazard and precautionary statements
Hazard statements
Harmful if swallowed
Toxic in contact with skin
Toxic if inhaled
May cause an allergic skin reaction
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
Precautionary Statements

Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands, and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray

Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
Call a POISON CENTER or doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC): None known
Other Information: Harmful to aquatic life

Section 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Phenyl Alpha Naphthylamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym(s)</td>
<td>1-Naphthalenamine, N-Phenyl-; PANA; Aceto Pan; 1-Anilinonaphthalene</td>
</tr>
<tr>
<td>Formula</td>
<td>C_{16}H_{13}N</td>
</tr>
<tr>
<td>CAS Number</td>
<td>90-30-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl-.beta.-Naphthylamine</td>
<td>135-88-6</td>
<td>0.5%</td>
</tr>
<tr>
<td>Aniline</td>
<td>62-53-3</td>
<td>0.25%</td>
</tr>
<tr>
<td>Phenyl Alpha Naphthylamine</td>
<td>90-30-2</td>
<td>99%</td>
</tr>
</tbody>
</table>
Section 4. First Aid Measures

First Aid Measures
General Advice: Show this safety data sheet to the doctor in attendance
Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Consult a physician.
Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Consult a physician.
Ingestion: Rinse mouth. Never give anything by mouth to an unconscious person. Consult a physician.
Protection of First-aiders: Use personal protective equipment. Avoid contact with skin, eyes, and clothing.

Most important symptoms and effects, both acute and delayed
Main Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically.

Section 5. Firefighting Measures

Unsuitable Extinguishing Media: No information available
Hazardous Combustion Products: Thermal decomposition or combustion may produce hazardous gases and/or materials.

Explosion Data
Sensitivity to mechanical impact: Not available.
Sensitivity to static discharge: Not available.

Specific Hazards Arising from the Chemical: Keep product and empty container away from heat and sources of ignition.
Protective Equipment and Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures
Personal Precautions: Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental Precautions: Local authorities should be advised if significant spillages cannot be contained. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and material for containment and cleaning up
Methods for Cleaning up: Evacuate personnel to safe areas. Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

Section 7. Handling and Storage

Precautions for safe handling
Handling: Use only in an area equipped with a safety shower. Ensure adequate ventilation. Use only in well-ventilated areas. Do not breathe vapors/dust. Avoid contact with skin, eyes, and clothing. Avoid repeated exposure.

Conditions for safe storage, including any incompatibilities
Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers

Section 8. Exposure Controls / Personal Protection

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl- beta. - Naphthylamine (135-88-6)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aniline (62-53-3)</td>
<td>2 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route</td>
<td>5 ppm TWA (including homologs); 19 mg/m³ TWA (including homologs) prevent or reduce skin absorption</td>
<td>100 ppm IDLH</td>
</tr>
<tr>
<td>Phenyl Alpha Naphthylamine (90-30-2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Engineering: Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment
Eye/face Protection: Tightly fitting safety goggles.
Skin and body protection: Wear protective gloves and protective clothing.
Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.
General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance: Tan to Purple crystalline
Physical State: Solid
Odor: Amine-like
Odor Threshold: No information available
pH: No data available
Melting/Freezing Point: 56 - 62°C
Boiling Point/Range: 335°C
Flash Point: ≥ 135°C
Evaporation Rate: Not available

Flammability Limits in Air
Upper Flammability Limit: No information available
Lower Flammability Limit: No information available

Vapor Pressure (20°C): 0.1 mmHg
Vapor Density: 7.6
Specific Gravity (20°C): 1.23 g/cm³
Water Solubility: Insoluble
Solubility in other solvents: No information available
Partition coefficient (n-Octanol/Water): No information available
Auto-ignition Temperature: > 500°C (Estimated)
Viscosity (Kinematic): No information available
Viscosity (Dynamic): No information available
Explosive Properties: No information available
Oxidizing Properties: No information available

Other Information
Softening Point: No information available
Molecular Weight: 219.29
VOC Content: No information available
Density: No information available
Bulk Density: No information available

Section 10. Stability and Reactivity

Reactivity: Not applicable
Chemical Stability: Stable under recommended storage conditions
Conditions to Avoid: Heat, flames, and sparks. Contact with metal may evolve flammable hydrogen gas.


Hazardous Decomposition Products: Carbon monoxide; Carbon dioxide (CO₂); Nitrogen Oxide (NOₓ)

Possibility of Hazardous Reactions: None under normal processing

Section 11. Toxicological Information

Product information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (Rat)</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl-. beta. - Naphthylamine (135-88-6)</td>
<td>8730 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Aniline (62-53-3)</td>
<td>250 mg/kg</td>
<td>1400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Phenyl Alpha Naphthylamine (90-30-2)</td>
<td>1625 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral): 1615 mg/kg
ATEmix (dermal): 300 mg/kg

Information on likely routes of exposure

Eyes: Irritating to eyes. Avoid contact with eyes.
Skin: Harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact. Avoid contact with skin.
Inhalation: Harmful by inhalation. Irritating to mucous membranes. Irritating to respiratory system. Avoid breathing dust.
Ingestion: Harmful if swallowed. Do not ingest.

Information on toxicological effects

Symptoms: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity: Possible carcinogen. California Proposition 65- Carcinogens List. (Aniline). The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl-. beta. - Naphthylamine (135-88-6)</td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Aniline (62-53-3)  A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans - - -

Eye Damage/Irritation: No information available.  
Skin Corrosion/Irritation: No information available.  
Sensitization: May cause sensitization by skin contact.  
Reproductive Effects: No information available.  
Mutagenic Effects: No information available.  
Developmental Effects: No information available.  
STOT - Single exposure: No information available.  
STOT - Repeated Exposure: No information available.  
Target Organ Effects: Eyes, Skin, Respiratory system.  
Aspiration Hazard: No information available.  

Numerical measures of toxicity - Product Information  
Acute Toxicity  
ATEmix (inhalation-gas): 700 mg/L  
ATEmix (inhalation-dust/mist): 1.5 mg/L  
ATEmix (inhalation-vapor): 3 mg/L

Section 12. Ecological Information

Ecotoxicity  
Harmful to aquatic life.  
99.25% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Freshwater Algae Data</th>
<th>Freshwater Fish Species Data</th>
<th>Microtox Data</th>
<th>Water Flea Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniline (62-53-3)</td>
<td>-</td>
<td>-</td>
<td>425 mg/L EC50 Photobacterium phosphoreum 5 min 488 mg/L EC50 Photobacterium phosphoreum 15 min</td>
<td>-</td>
</tr>
</tbody>
</table>

Persistence/Degradability: No information available.  
Bioaccumulation/Accumulation: No information available.  
Mobility in Soil: No information available.
**Chemical Name** | **Log Pow**  
--- | ---  
Aniline (62-53-3) | 0.9  

### Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

### Section 14. Transport Information

**DOT**  
**UN-No:** UN3077  
**Proper Shipping Name:** Environmentally Hazardous Substance, Solid, N.O.S  
**Hazard Class:** Class 9  
**Packing Group:** PG III  
**Description:** UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III  
**Emergency Response Guide Number:** 171

**TDG**  
**UN-No:** UN3077  
**Proper Shipping Name:** Environmentally Hazardous Substance, Solid, N.O.S  
**Hazard Class:** Class 9  
**Packing Group:** PG III  
**Description:** UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III

**MEX**  
**UN-No:** UN3077  
**Hazard Class:** Class 9  
**Packing Group:** PG III  
**Description:** UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III

**ICAO**  
**UN-No:** UN3077  
**Proper Shipping Name:** Environmentally Hazardous Substance, Solid, N.O.S  
**Hazard Class:** Class 9  
**Packing Group:** PG III  
**Description:** UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III
IATA
UN-No: UN3077
Hazard Class: Class 9
Packing Group: PG III
Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III

IMDG/IMO
UN-No: UN3077
Hazard Class: Class 9
Packing Group: PG III
EmS No.: F-A, S-F
Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III

RID
UN-No: UN3077
Hazard Class: Class 9
Packing Group: PG III
Classification Code: M7
Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III
ADR/RID Labels: 9

ADR
UN-No: UN3077
Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S
Hazard Class: Class 9
Packing Group: PG III
Classification Code: M7
Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III
ADR/RID Labels: 9

ADN
Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S
Hazard Class: Class 9
Packing Group: PG III
Classification Code: M7
Special Provisions: 274, 909, 944
Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha Naphthylamine), 9, PG III
Hazard Labels: 9
Limited Quantity: 5kg
### Section 15. Regulatory Information

#### International Inventories
- **U.S.A. (TSCA):** Complies
- **Canada (DSL):** Complies
- **EU (EINECS):** Complies
- **EU (ELINCS):** Does not comply
- **Japan (ENCS):** Complies
- **China:** Complies
- **Korea (KECL):** Complies
- **Philippines (PICCS):** Complies
- **Australia (AICS):** Complies

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>USA (TSCA)</th>
<th>Canada (DSL)</th>
<th>EU (EINECS)</th>
<th>EU (ELINCS)</th>
<th>Japan (ENCS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl--beta--Naphthylamine</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>-</td>
<td>Present</td>
</tr>
<tr>
<td>Aniline</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>-</td>
<td>Present</td>
</tr>
<tr>
<td>Phenyl Alpha Naphthylamine</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>-</td>
<td>Present</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>China</th>
<th>Korea (KECL)</th>
<th>Philippines (PICCS)</th>
<th>Australia (AICS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl--beta--Naphthylamine</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Aniline</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Phenyl Alpha Naphthylamine</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
</tr>
</tbody>
</table>

#### Federal Regulations
- **SARA 313:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Component</th>
<th>SARA 313- Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniline 62-53-3 (0.25)</td>
<td>1.0% de minimis concentration</td>
</tr>
</tbody>
</table>

#### SARA 311/312 Hazardous Categorization
- **Acute Health Hazard:** Yes
- **Chronic Health Hazard:** Yes
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>HAPS Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniline</td>
<td>Present</td>
</tr>
</tbody>
</table>

CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CERCLA/SARA Hazardous Substances</th>
<th>CERCLA/SARA RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniline (62-53-3)</td>
<td>5000lb final RQ; 2270 kg final RQ</td>
<td>5000lb final RQ; 2270 kg final RQ</td>
</tr>
</tbody>
</table>

State Regulations
California Proposition 65: This product contains the following Proposition 65 chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Category</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aniline</td>
<td>62-53-3</td>
<td>carcinogen, initial date 1/1/90</td>
<td>carcinogen, initial date 1/1/90</td>
</tr>
</tbody>
</table>

State Right-to-Know
This product does not contain any state Right-to-Know chemicals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Illinois</th>
<th>Rhode Island</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Phenyl-. beta. - Naphthylamine (135-88-6)</td>
<td>sn 1418</td>
<td>Present</td>
<td>Toxic</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>Aniline (62-53-3)</td>
<td>sn 0135</td>
<td>Extraordinarily hazardous</td>
<td>Present</td>
<td>Toxic (skin); Flammable (Skin)</td>
<td>Environmental hazard</td>
</tr>
</tbody>
</table>

US EPA Label Information
EPA Pesticide Registration Number: Not applicable
Canada

**WHMIS Statement:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**NFPA Rating**
- **Health:** 2
- **Flammability:** 1
- **Reactivity:** 0

**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.

**REVISION DATE:** 12/29/2015