

(Phenyl Alpha Naphthylamine) DATE PREPARED: 12/29/2015

Section 1. Product and Company Identification

Product Name Phenyl Alpha Naphthylamine

90-30-2 **CAS Number**

Parchem - fine & specialty chemicals

415 Huguenot Street New Rochelle, NY 10801

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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



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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

Common Name Phenyl Alpha Naphthylamine

Synonym(s) 1-Naphthalenamine, N-Phenyl-; PANA; Aceto Pan; 1-Anilinonaphthalene

Formula C₁₆H₁₃N CAS Number 90-30-2

| COMPONENT | CAS NUMBER | CONCENTRATION |
|----------------------------|------------|---------------|
| N-PhenylbetaNaphthylamine | 135-88-6 | 0.5% |
| Aniline | 62-53-3 | 0.25% |
| Phenyl Alpha Naphthylamine | 90-30-2 | 99% |





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

Suitable Extinguishing Media: Water spray. Carbon dioxide (CO₂). Dry powder. Foam.

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.



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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

Incompatible Materials: Strong oxidizing agents. Strong acids.

Section 8. Exposure Controls / Personal Protection

Exposure Guidelines

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

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: $56 - 62^{\circ}$ 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



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Conditions to Avoid: Heat, flames, and sparks. Contact with metal may evolve flammable

hydrogen gas.

Incompatible Materials: Strong oxidizing agents. Strong acids.

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

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|------------------|------------------|-----------------|
| N-Phenyl beta | 8730 mg/kg (Rat) | - | - |
| Naphthylamine (135-88-6) | | | |
| Aniline (62-53-3) | 250 mg/kg (Rat) | 1400 mg/kg (Rat) | - |
| Phenyl Alpha Naphthylamine (90-30-2) | 1625 mg/kg (Rat) | - | - |

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.

| Chemical | ACGIH | IARC | NTP | OSHA |
|---------------|----------------------------|------|-----|------|
| Name | | | | |
| N-Phenyl beta | A4 - Not Classifiable as a | - | - | - |
| Naphthylamine | Human Carcinogen | | | |
| (135-88-6) | | | | |



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| 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.

Chronic Toxicity: Avoid repeated exposure. Possible carcinogen. California Proposition 65

Carcinogens List. (Aniline).

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

| Chemical Freshwater Name Algae Data | | Freshwater Fish Species | Microtox Data | Water Flea |
|-------------------------------------|---|-------------------------|--------------------------|---------------|
| | | Data | | Data |
| Aniline (62-53- | - | | 425 mg/L EC50 | - 1 |
| 3) | | | Photobacterium | |
| | | | phosphoreum 5 min 488 | |
| | | | mg/L EC50 Photobacterium | |
| | | | phosphoreum 15 min | |

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 |||

Description: UN3077, Environmentally Hazardous Substance, Solid, N.O.S. (Phenyl Alpha

Naphthylamine), 9, PG III



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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 |||
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 (EUNECS): Does not com

EU (ELINCS): Does not comply **Japan (ENCS):** Complies

China: Complies

Korea (KECL): Complies
Philippines (PICCS): Complies
Australia (AICS): Complies

| Chemical | USA (TSCA) | Canada | EU (EINECS) | EU (EINECS) | Japan |
|---------------|------------|---------|-------------|-------------|---------|
| Name | | (DSL) | | | (ENCS) |
| N-Phenyl | Present | Present | Present | - | Present |
| beta | | | | | |
| Naphthylamine | | | | | |
| Aniline | Present | Present | Present | - | Present |
| Phenyl Alpha | Present | Present | Present | - | Present |
| Naphthylamine | | | | | |
| Chemical | China | Korea | Philippines | Australia | |
| Name | | (KECL) | (PICCS) | (AIC) | |
| N-Phenyl | Present | Present | Present | Present | |
| beta | | | | | |
| Naphthylamine | 7 | | | | |
| Aniline | Present | Present | Present | Present | |
| Phenyl Alpha | Present | Present | Present | Present | |
| Naphthylamine | 74. | | | | |

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:

| Component | SARA 313- Threshold Values | |
|--------------------------|-------------------------------|--|
| Aniline 62-53-3 (0.25) | 1.0% de minimis concentration | |

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:

| Chemical NameH | APS Data | |
|----------------|----------|---------|
| Aniline | | Present |

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

| Chemical Name | CERCLA/SARA Hazardous | CERCLAISARA | RQ |
|-------------------|--------------------------|-------------|------------------|
| | Substances | RQ | |
| Aniline (62-53-3) | 5000lb final RQ; 2270 kg | | 5000lb final RQ; |
| | final RQ | | 2270 kg final RQ |

State Regulations

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

| Chemical Name | CAS-No | Category | Туре |
|---------------|---------|---------------------|---------------------|
| Aniline | 62-53-3 | carcinogen, initial | carcinogen, initial |
| | | date 1/1/90 | date 1/1/90 |

State Right-to-Know

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

| Chemical | New | Massachusetts | Illinois | Rhode | Pennsylvania |
|-------------------|---------|-----------------|----------|---------------|---------------|
| Name | Jersey | | | Island | |
| N-Phenyl beta | sn 1418 | Present | | Toxic | Present |
| Naphthylamine | | | | | |
| (135-88-6) | | | | | |
| Aniline (62-53-3) | sn 0135 | Extraordinarily | Present | Toxic (skin); | Environmental |
| | | hazardous | | Flammable | hazard |
| | | | | (Skin) | |

US EPA Label Information

EPA Pesticide Registration Number: Not applicable



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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

