

## MATERIAL SAFETY DATA SHEET (MSDS)

### 2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : 2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)

Product code : N0146700500

Identification of the product : 2-NITROANILINE PURE 98%  
CAS No: 88-74-4

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

##### 1.3. Details of the supplier of the safety data sheet

Company identification SUVCHEM  
Chaitanya Tower, 2nd Floor, Office # 206,  
Siddharth Nagar, S.V. Road,  
Goregaon (West), Mumbai - 400062,  
Maharashtra, India.  
Contact: +91 22 28725393 / 94 / 95  
Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

###### Classification EC 67/548 or EC 1999/45

Classification : T; R23/24/25  
R33  
R52-53

###### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301  
Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311  
Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 3 (CLP :  
Aquatic Chronic 3) H412

##### 2.2. Label elements

**MATERIAL SAFETY DATA SHEET (MSDS)**
**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**2. Hazards identification -DSD (continued)**
Labelling EC 67/548 or EC 1999/45
**Symbol(s)**

**Symbol(s)**

: T : Toxic

**R Phrase(s)**

: R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.

R33 : Danger of cumulative effects.

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S Phrase(s)**

:

S33 : Take precautionary measures against static discharges.

Labelling Regulation EC 1272/2008 (CLP)
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H301 : Toxic if swallowed.

H311 : Toxic in contact with skin.

H331 : Toxic if inhaled.

H412 : Harmful to aquatic life with long lasting effects.

**Precautionary statements**
**• Prevention**

: P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

**• Response**

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.

P363: Wash contaminated clothing before reuse.

P361: Remove immediately all contaminated clothing.

**• Storage**

: P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**2. Hazards identification -DSD (continued)**
**2.3. Other hazards**

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**3. Composition/information on ingredients**

**Substance / Preparation** : 2-NITROANILINE PURE 98%

Substance.

Contains no other components or impurities which will influence the classification of the product.

**4. First aid measures**
**4.1. Description of first aid measures**

**Inhalation** : Assure fresh air breathing. Allow the victim to rest. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion** : Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms relating to use** : Repeated exposure to this material can result in absorption through skin causing significant health hazard.  
 Danger of serious damage to health by prolonged exposure through inhalation.  
 Swallowing a small quantity of this material will result in serious health hazard.

**4.3. Indication of any immediate medical attention and special treatment needed**

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**MATERIAL SAFETY DATA SHEET (MSDS)**
**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**5. Fire-fighting measures**
**5.1. Extinguishing media**

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media** : Do not use a heavy water stream.
- Surrounding fires** : Use water spray or fog for cooling exposed containers.

**5.2. Special hazards arising from the substance or mixture**

- Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

**5.3. Advice for fire-fighters**

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

- For emergency responders** : Equip cleanup crew with proper protection.  
Ventilate area.
- For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

- Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust.  
Store away from other materials.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**7. Handling and storage**
**7.1. Precautions for safe handling**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**7. Handling and storage (continued)**

- Handling** : Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.
- Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

**7.2. Conditions for safe storage, including any incompatibilities**

- Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.
- Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

- Specific end use(s)** : None.

**8. Exposure controls/personal protection**
**8.1. Exposure controls**

- Personal protection** : Avoid all unnecessary exposure.
- **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.
  - **Hand protection** : Wear protective gloves.
  - **Eye protection** : Chemical goggles or safety glasses.
  - **Others** : When using, do not eat, drink or smoke.

**8.2. Control parameters**

- Occupational Exposure Limits** : No data available.

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

- Physical state at 20 °C** : Solid.
- Colour** : Colorless
- Odour** : N/A
- Odour threshold** : No data available.
- pH value** : Not applicable.
- Melting point [°C]** : 70 - 72 °C
- Decomposition point [°C]** : N/A
- Critical temperature [°C]** : N/A

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**9. Physical and chemical properties (continued)**

Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: 167°C
Boiling point [°C]	: N/A
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: N/A
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: 1.1 g/l (20 c)
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity.**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**

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**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**10. Stability and reactivity (continued)**

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

**Materials to avoid** : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- **Inhalation** : Toxic if inhaled.
- **Dermal** : Toxic in contact with skin.
- **Ingestion** : Toxic if swallowed.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Harmful to aquatic life with long lasting effects.

**12.2. Persistence - degradability**

**Persistence - degradability** : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

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**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**
**12. Ecological information (continued)**
**12.4. Mobility in soil**

Mobility in soil : Not established.

**12.5. Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

Environmental precautions : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions : Hazardous waste due to toxicity.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

Proper shipping name : NITROANILINES (o-, m-, p-)  
 UN N° : 1661  
 H.I. nr : 60  
 ADR - Class : 6.1  
 Labelling - Transport : 6.1 : Toxic substances.



ADR - Classification code : T2  
 ADR - Group : II  
 ADR - Packing instructions : P002  
 ADR - Limited Quantity : 500 G



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**14. Transport information (continued)**

ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.


**14.2. Sea transport (IMDG) [English only]**

Proper shipping name : NITROANILINES (o-, m-, p-)  
 UN N° : 1661  
 IMO-IMDG - Class or division : 6.1 : Toxic substances.  
 IMO-IMDG - Packing group : II  
 IMO-IMDG - Packing instructions : P002  
 IMO-IMDG - Limited quantities : 500 g  
 IMO-IMDG - Marine pollution : No  
 EMS-Nr : F-A S-A

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name : NITROANILINES (o-, m-, p-)  
 UN N° : 1661  
 IATA - Class or division : 6.1 : Toxic substances.  
 IATA - Packing group : II  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
 - Passenger and Cargo - Packing instruction : 669  
 - Passenger and Cargo - Maximum Quantity/Packing : 25 kg  
 IATA - Cargo only : ALLOWED  
 - Cargo only - Packing instruction : 676  
 - Cargo only - Maximum Quantity/Packing : 100 kg  
 IATA - Limited Quantities : 1 kg  
 ERG-Nr : 6L

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.

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**MATERIAL SAFETY DATA SHEET (MSDS)**

**2-NITRO ANILINE (FOR SYNTHESIS) (ORTHO NITRO ANILINE)**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**