

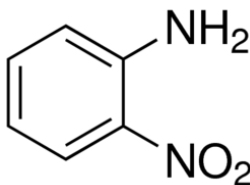
CAS No: 88-74-4 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Substance
 :
 CAS No : 88-74-4
 Product code : 04925
 Chemical structure :



Synonyms : o-Nitroaniline / 2-Nitrobenzamine

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
 107 Wode House Road, Jehangir Villa, Colaba
 400005 Mumbai - INDIA
 T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 3 H301
 Acute toxicity (dermal), Category 3 H311
 Acute toxicity (inhal.), Category 3 H331
 Specific target organ toxicity — Repeated exposure, Category 2 H373
 Hazardous to the aquatic environment — Chronic H412

2-NITROANILINE Extra Pure

Safety Data Sheet

Hazard, Category 3

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

T; R23/24/25

R52/53

R33

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

Signal word (CLP) : Danger

Hazard statements (CLP) : H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician
P311 - Call a POISON CENTER or doctor/physician

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : 2-NITROANILINE Extra Pure

CAS No : 88-74-4

Full text of R- and H-phrases: see section 16

2-NITROANILINE Extra Pure

Safety Data Sheet

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

- Symptoms/injuries after inhalation : Toxic if inhaled.
- Symptoms/injuries after skin contact : Toxic in contact with skin.
- Symptoms/injuries after ingestion : Toxic if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Harmful to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clear up rapidly by scoop or vacuum.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

2-NITROANILINE Extra Pure

Safety Data Sheet

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection : protective gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : Colorless.
Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 70 - 72
Freezing point : No data available
Boiling point : No data available
Flash point : 167 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Solubility : Water: 1.1 g/l (20°C)
Log Pow : 5

2-NITROANILINE Extra Pure

Safety Data Sheet

Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation: Toxic if inhaled.
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Additional information	: There are potential chronic health effects to consider
Aspiration hazard	: Not classified

2-NITROANILINE Extra Pure

Safety Data Sheet

Potential adverse human health effects and symptoms : Toxic if swallowed. Toxic in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

2-NITROANILINE Extra Pure (88-74-4)

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

12.3. Bioaccumulative potential

2-NITROANILINE Extra Pure (88-74-4)

Log Pow	5
---------	---

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1661

UN-No. (IMDG) : 1661

UN-No.(IATA) : 1661

UN-No.(ADN) : 1661

UN-No. (RID) : 1661

14.2. UN proper shipping name

Proper Shipping Name (ADR) : NITROANILINES (O-, M-, P-)

Proper Shipping Name (IMDG) : NITROANILINES (o-, m-, p-)

Proper Shipping Name (IATA) : NITROANILINES

2-NITROANILINE Extra Pure

Safety Data Sheet

Proper Shipping Name (ADN)	: NITROANILINES (o-, m-, p-)
Proper Shipping Name (RID)	: NITROANILINES (o-, m-, p-)
Transport document description (ADR)	: UN 1661 NITROANILINES (O-, M-, P-), 6.1, II, (D/E)
Transport document description (IMDG)	: UN 1661 NITROANILINES (o-, m-, p-), 6.1, II
Transport document description (IATA)	: UN 1661 NITROANILINES, 6.1, II
Transport document description (ADN)	: UN 1661 NITROANILINES (o-, m-, p-), 6.1, II
Transport document description (RID)	: UN 1661 NITROANILINES (o-, m-, p-), 6.1, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 6.1
Danger labels (ADR)	: 6.1



IMDG

Transport hazard class(es) (IMDG)	: 6.1
Danger labels (IMDG)	: 6.1



IATA

Transport hazard class(es) (IATA)	: 6.1
Hazard labels (IATA)	: 6.1



ADN

Transport hazard class(es) (ADN)	: 6.1
Danger labels (ADN)	: 6.1



RID

Transport hazard class(es) (RID)	: 6.1
Danger labels (RID)	: 6.1



2-NITROANILINE Extra Pure

Safety Data Sheet

14.4. Packing group

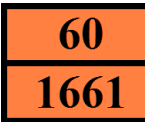
Packing group (ADR)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II
Packing group (ADN)	: II
Packing group (RID)	: II

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: Yes (IMDG only)
Other information	: No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: T2
Special provision (ADR)	: 279
Limited quantities (ADR)	: 500g
Excepted quantities (ADR)	: E4
Packing instructions (ADR)	: P002, IBC08
Special packing provisions (ADR)	: B4
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAH, L4BH
Tank special provisions (ADR)	: TU15, TE19
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V11
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13, CV28
Special provisions for carriage - Operation (ADR)	: S9, S19
Hazard identification number (Kemler No.)	: 60
Orange plates	: 
Tunnel restriction code (ADR)	: D/E
EAC code	: 2X

- Transport by sea

Special provision (IMDG)	: 279
Limited quantities (IMDG)	: 500 g
Excepted quantities (IMDG)	: E4
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B2, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A

2-NITROANILINE Extra Pure

Safety Data Sheet

EmS-No. (Spillage) : S-A
Stowage category (IMDG) : A
MFAG-No : 153

- Air transport

PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y644
PCA limited quantity max net quantity (IATA) : 1kg
PCA packing instructions (IATA) : 669
PCA max net quantity (IATA) : 25kg
CAO packing instructions (IATA) : 676
CAO max net quantity (IATA) : 100kg
Special provision (IATA) : A113
ERG code (IATA) : 6L

- Inland waterway transport

Classification code (ADN) : T2
Special provisions (ADN) : 279, 802
Limited quantities (ADN) : 500 g
Excepted quantities (ADN) : E4
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : T2
Special provision (RID) : 279
Limited quantities (RID) : 500g
Excepted quantities (RID) : E4
Packing instructions (RID) : P002, IBC08
Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP10
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions (RID) : TP33
Tank codes for RID tanks (RID) : SGAH, L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Packages (RID) : W11
Special provisions for carriage – Loading and unloading (RID) : CW13, CW28, CW31
Colis express (express parcels) (RID) : CE9
Hazard identification number (RID) : 60

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

2-NITROANILINE Extra Pure is not on the REACH Candidate List

2-NITROANILINE Extra Pure is not on the REACH Annex XIV List

2-NITROANILINE Extra Pure

Safety Data Sheet

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to water (KBwS-Beschluss; WGK No 702)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H301	Toxic if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects
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
T	Toxic

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product