

**Material Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006

**2-ETHYL-5-NITROANILINE**

Revision date 07.04.2022  
Version 5  
Replaces version from 29.09.2016

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**1. Identification of the substance/Mixture and of the company/undertaking**

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**1.1 Product identifier**

Product name 2-Ethyl-5-nitroaniline  
CAS-No. 20191-74-6  
EC-No. Not classified

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

Identified uses Laboratory chemicals, Manufacture of substances.

**1.3 Details of the supplier of the safety data sheet**

Name Valsynthese SA  
Factory address Valsynthese SA  
Fabrikstrasse 48  
PO Box 636  
3900 Brig / Switzerland  
Office address Valsynthese SA  
Societe Suisse des Explosifs Group  
PO Box 636  
3900 Brig / Switzerland

Information Department This number is available only during office hours.  
Phone +41 27 922 71 11  
E-Mail (Responsible person):  
msds@explosif.ch

**1.4 Emergency Phone Number** +41 27 922 71 11 (only during office hours) or  
Toxicological Information Centre in Switzerland: Tel. 145  
or +41 (0) 44 251 51 51

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## 2. Hazards Identification

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### 2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 4), H312

Acute toxicity, Inhalation (Category 4), H332

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Hazard pictogram(s)



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed.

H312

Harmful in contact with skin.

H332

Harmful if inhaled.

Precautionary statement(s)

P280

Wear protective gloves/protective clothing/eye protection/face protection.

### 2.3 Other hazards

None

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## 3. Composition / Information on ingredients

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### 3.1 Substance

Product name 2-Ethyl-5-nitroaniline

Molecular formula  $C_8H_{10}N_2O_2$

Molecular weight 166.18g/mol

Cas-No. 20191-74-6

EC-No. -

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>2-Ethyl-5-nitroaniline</b>		
CAS-No. 20191-74-6 EC-No. -	Acute Tox. 4; H302; H312; H332	<=100%

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16.

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## 4. First-aid measures

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### 4.1 Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

No data available

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## 5. Firefighting measures

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### 5.1 Extinguishing media

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

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO<sub>x</sub>).

### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Additional information

No data available

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## 6. Accidental release measures

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### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and material for containment and cleaning up

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

### 6.4 Reference to other sections

For further and detailed information see section 8 and 13.

### 6.5 Additional Information

No data available

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## 7. Handling and storage

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### 7.1 Precautions for safe handling

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

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

No data available

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## 8. Exposure controls / Personal protection

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### 8.1 Control parameters

No data available

### 8.2 Exposure controls

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

#### Appropriate engineering controls

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Facilities using or storing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to avoid raising dust. Do not eat, smoke during work. Wash the hands. Changes contaminated

clothing and wash them before re-use.

### Personal protective equipment

Eye/face protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
Body Protection	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Environmental exposure controls	Do not let product enter drains.

### 8.3 Additional information

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

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## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

Appearance	Orange to yellow powder
Odour	No data available
Odour threshold	No data available
pH value	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available

Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	Log Pow: 1.879
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

## 9.2 Other information

No data available

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## 10. Stability and reactivity

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### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable at normal temperature and general conditions of work.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Contact with incompatible materials. Excess heat. Dusty conditions.

### 10.5 Incompatible materials

Strong oxidizing agents.

### \* 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>).

Other decomposition products - No data available

In the event of fire: see section 5



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## 11. Toxicological information

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### 11.1 Information on toxicological effects

Acute toxicity	LD50 Oral – Rat – 1100 mg/kg
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Eye damage/irritation	No data available
Respiratory or skin sensitisation	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modelling.
Germ cell mutagenicity	No data available
Carcinogenicity	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.
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available

### Additional information

RTECS: Not available

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## 12. Ecological information

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### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulation potential

No data available

### 12.4 Mobility in soil

No data available

### \* 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### 12.6 Other adverse effects

No data available

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## 13. Disposal considerations

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### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

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## 14. Transport information

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### 14.1 UN Number

ADR/RID: -    IMDG: -    IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous                          IMDG: Not dangerous goods                          IATA: Not dangerous goods  
goods

### 14.3 Transport hazard class(es)

ADR/RID: -    IMDG: -    IATA: -

### 14.4 Packing group

ADR/RID: -    IMDG: -    IATA: -

### 14.5 Environmental hazards

ADR/RID: no    IMDG Marine pollutant: no    IATA: no

### 14.6 Special precautions for user

No data available

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

No data available

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## 15. Regulatory information

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### \* 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. International Chemical Weapons Convention : Neither banned nor restricted (CWC) Schedules of Toxic Chemicals and Precursors



## 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

## 15.3 Additional information

No data available

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## 16. Other information

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### 16.1 Information regarding the revision of the safety data sheet

\* Data compared to the previous version altered.

### 16.2 Full text of H-Statements referred to under sections 2 and 3

Acute Tox.	Acute toxicity
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.

### 16.3 Additional information

The information contained herein is in conformity with EU Directive EC 1907/2006 and EC 1272/2008, and is believed to be accurate and represents the best information currently available to us on the date of publication. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Valsynthese SA be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Valsynthese SA has been advised of the possibility of such damages.

